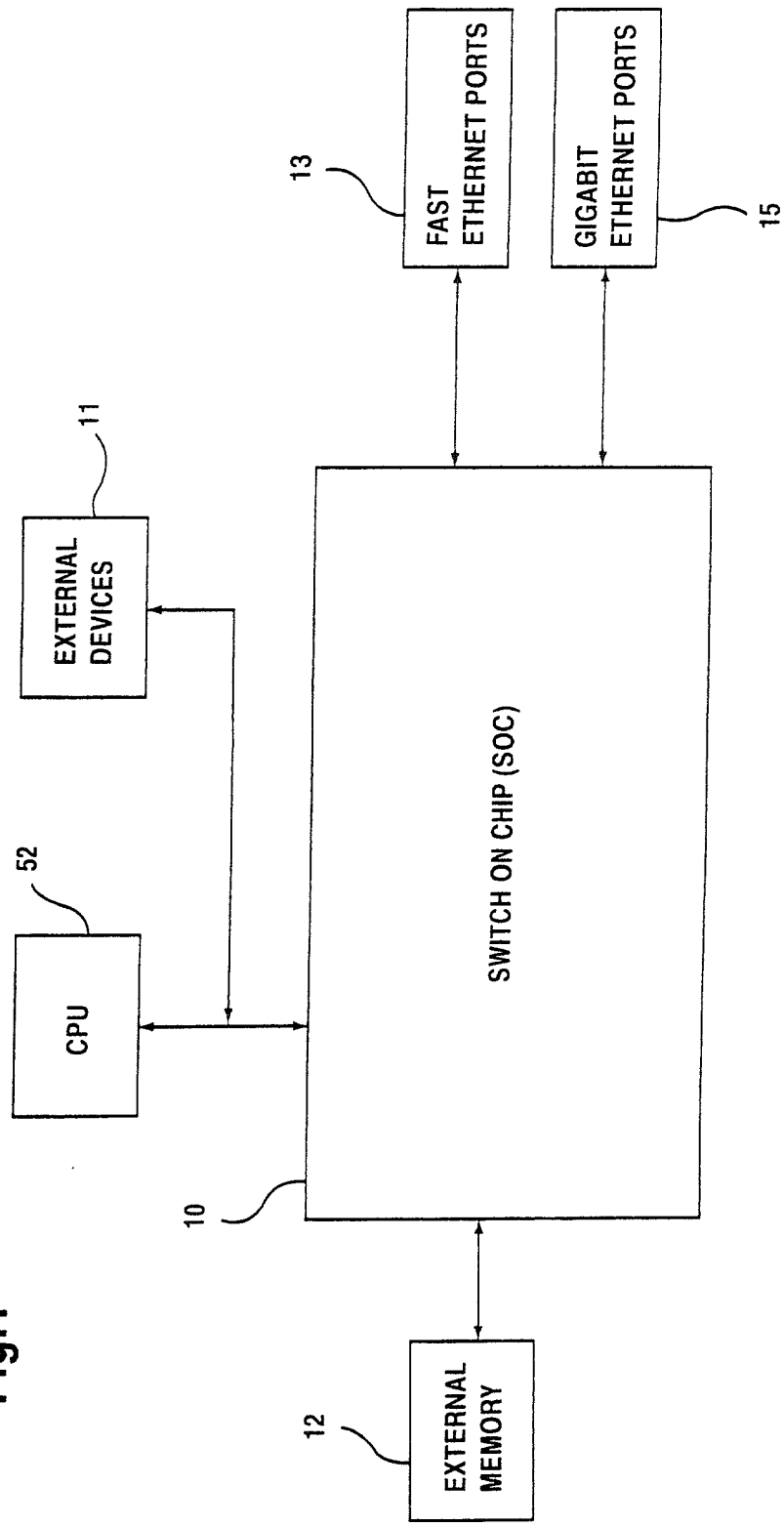


Fig.1



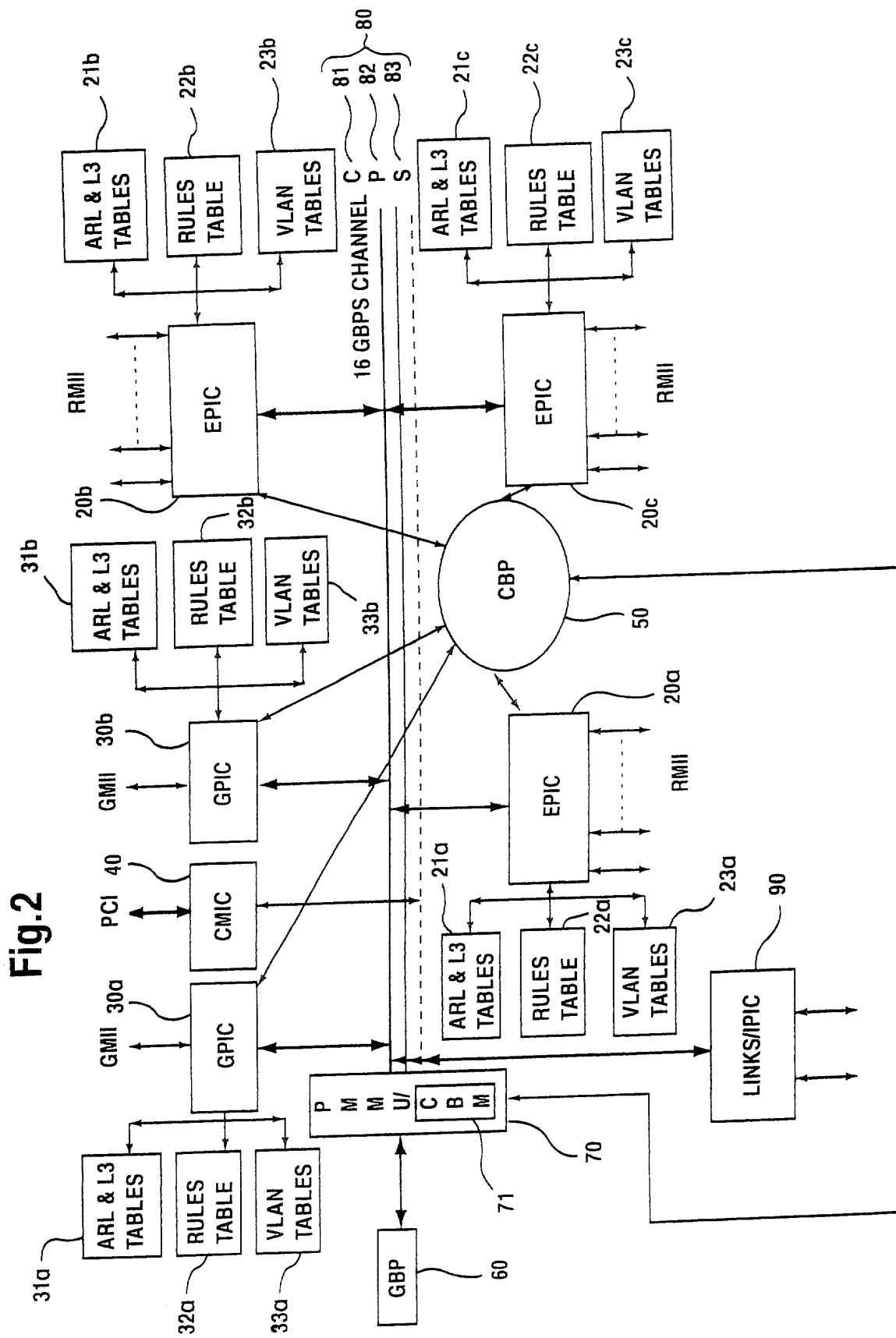
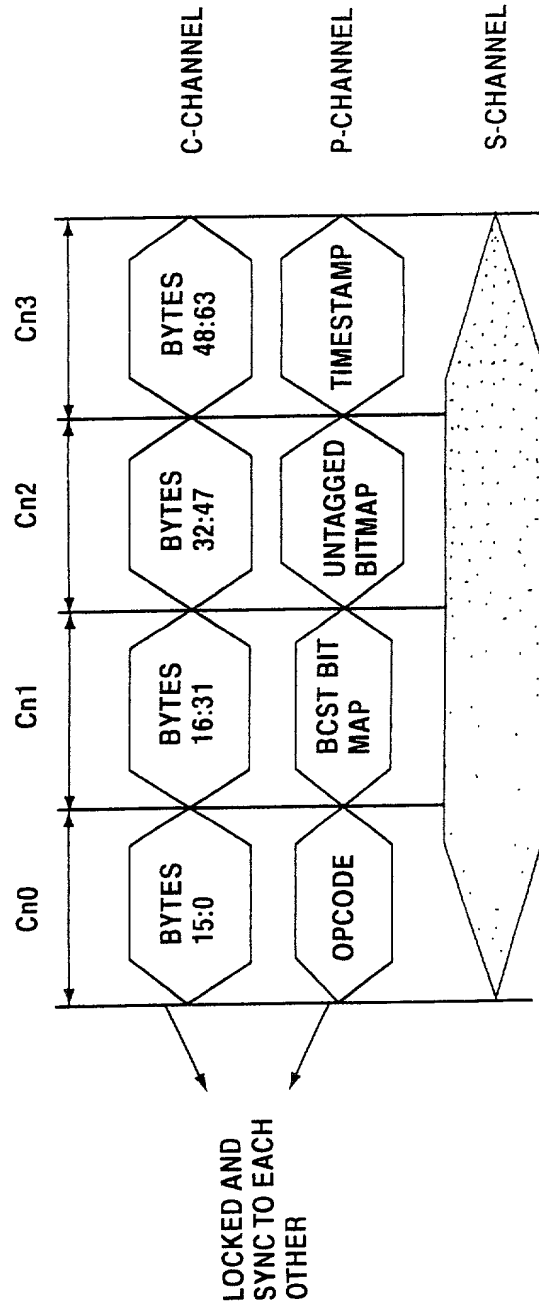


Fig.3



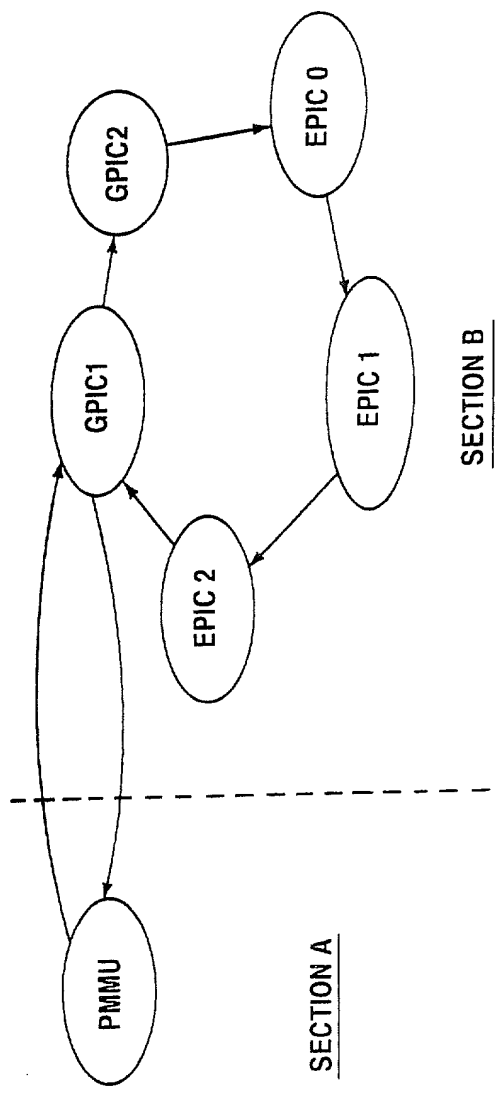


Fig. 4a

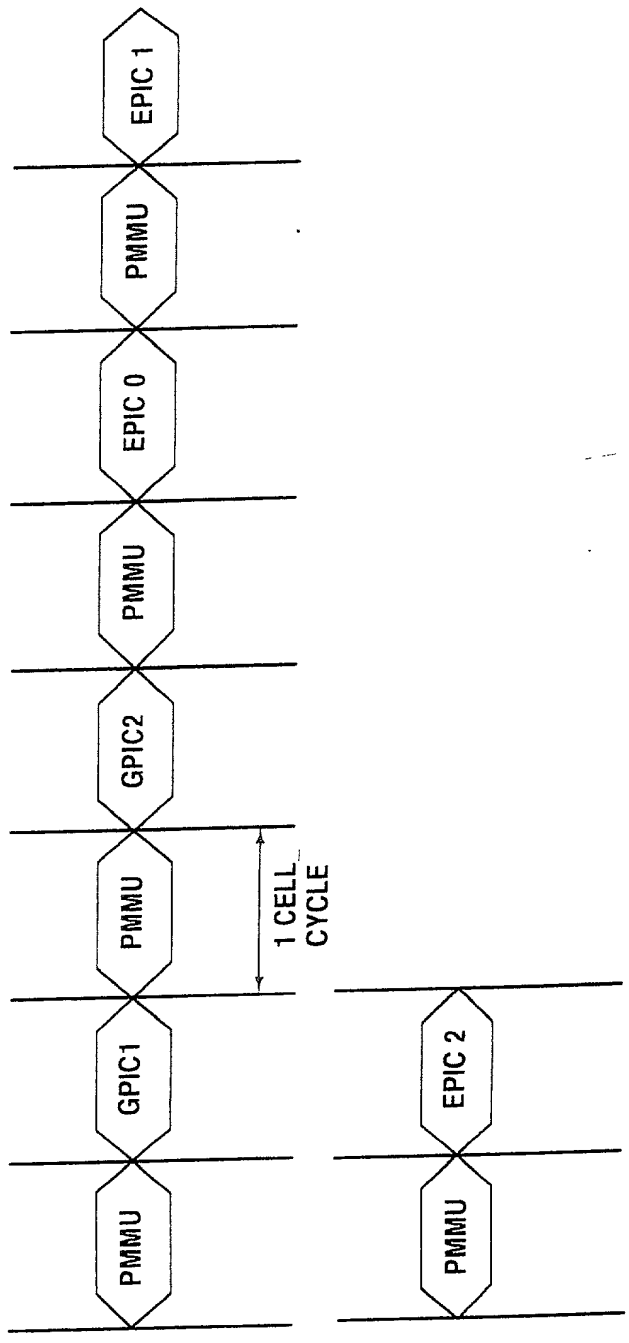


Fig. 4b

| 30         | 28               | 26       | 24          | 22            | 20 | 18  | 16 | 14 | 12 | 10 | 8 | 6 | 4   | 2 | 0 |
|------------|------------------|----------|-------------|---------------|----|-----|----|----|----|----|---|---|-----|---|---|
| OP<br>CODE | I<br>P<br>P<br>X | RESERVED | NXT<br>CELL | SRC DEST PORT |    | COS |    | J  | S  | E  | P | O | LEN |   |   |

|   |    |     |    |    |    |    |    |    |    |    |   |   |   |   |   |
|---|----|-----|----|----|----|----|----|----|----|----|---|---|---|---|---|
| 30  | 28 | 26  | 24 | 22 | 20 | 18 | 16 | 14 | 12 | 10 | 8 | 6 | 4 | 2 | 0 |
| U   |    | RES |    |    |    |    |    |    |    |    |   |   |   |   |   |
| UNTAGGED PORTBITMAP/SRC PORT NUMBER (BIT0..5) |    |     |    |    |    |    |    |    |    |    |   |   |   |   |   |

|             |    |    |    |    |    |    |    |    |            |    |   |   |   |   |   |
|-------------|----|----|----|----|----|----|----|----|------------|----|---|---|---|---|---|
| 30          | 28 | 26 | 24 | 22 | 20 | 18 | 16 | 14 | 12         | 10 | 8 | 6 | 4 | 2 | 0 |
| CPU OPCODES |    |    |    |    |    |    |    |    | TIME STAMP |    |   |   |   |   |   |



**Fig.7**

PRIOR ART

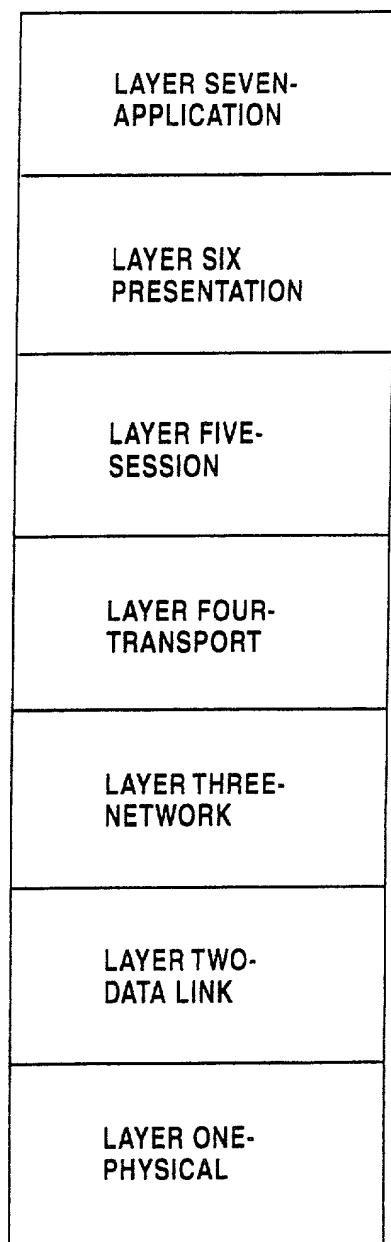


Fig.8

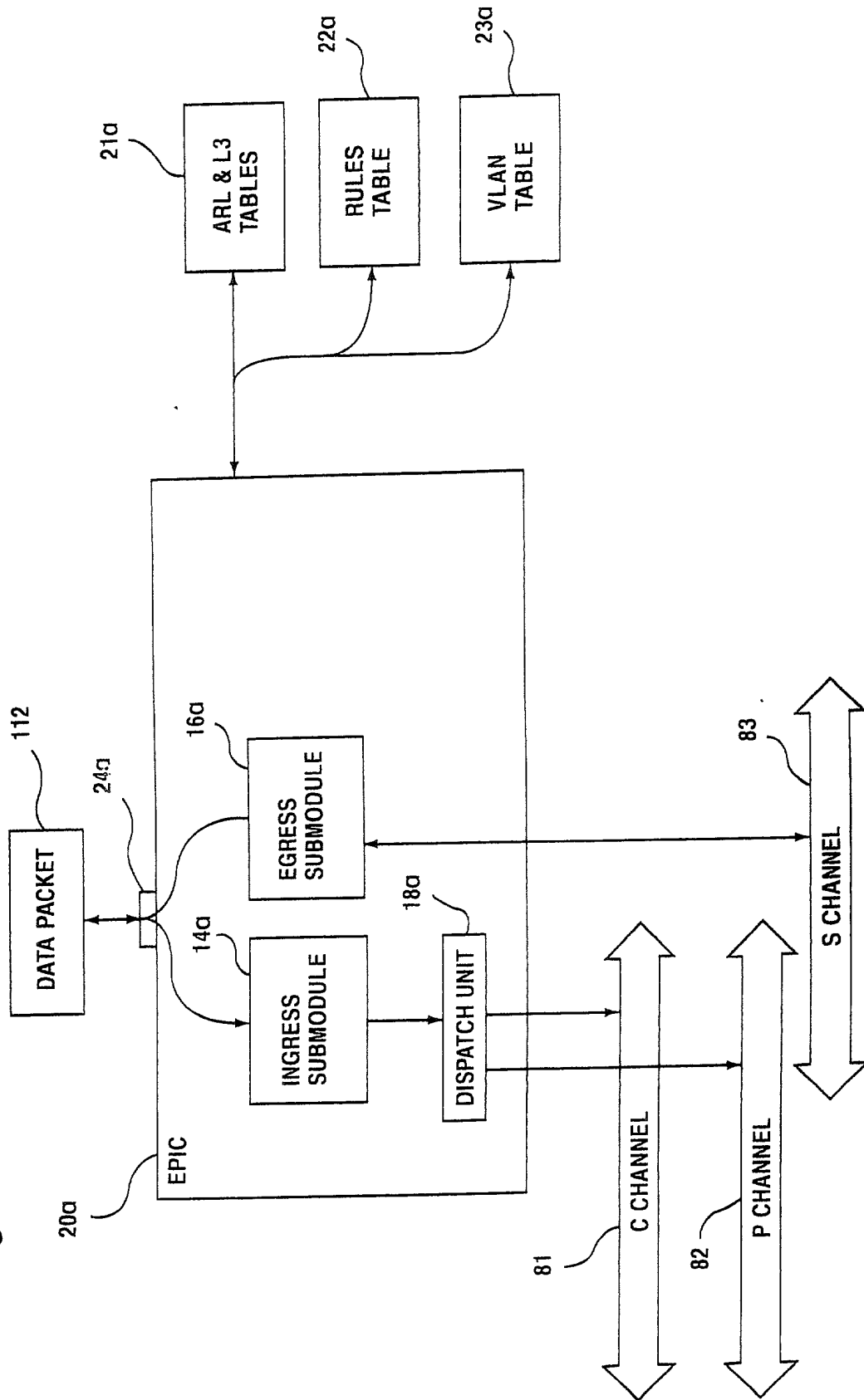




Fig.9

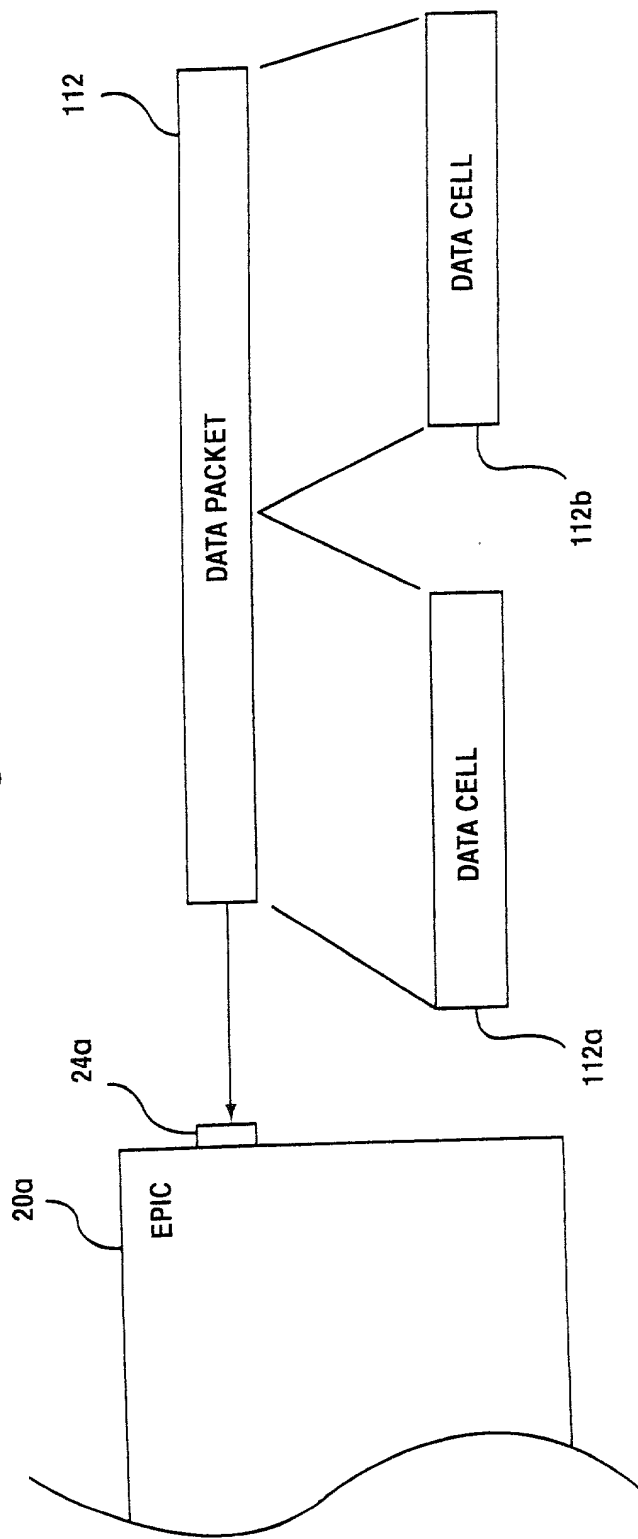


Fig.10

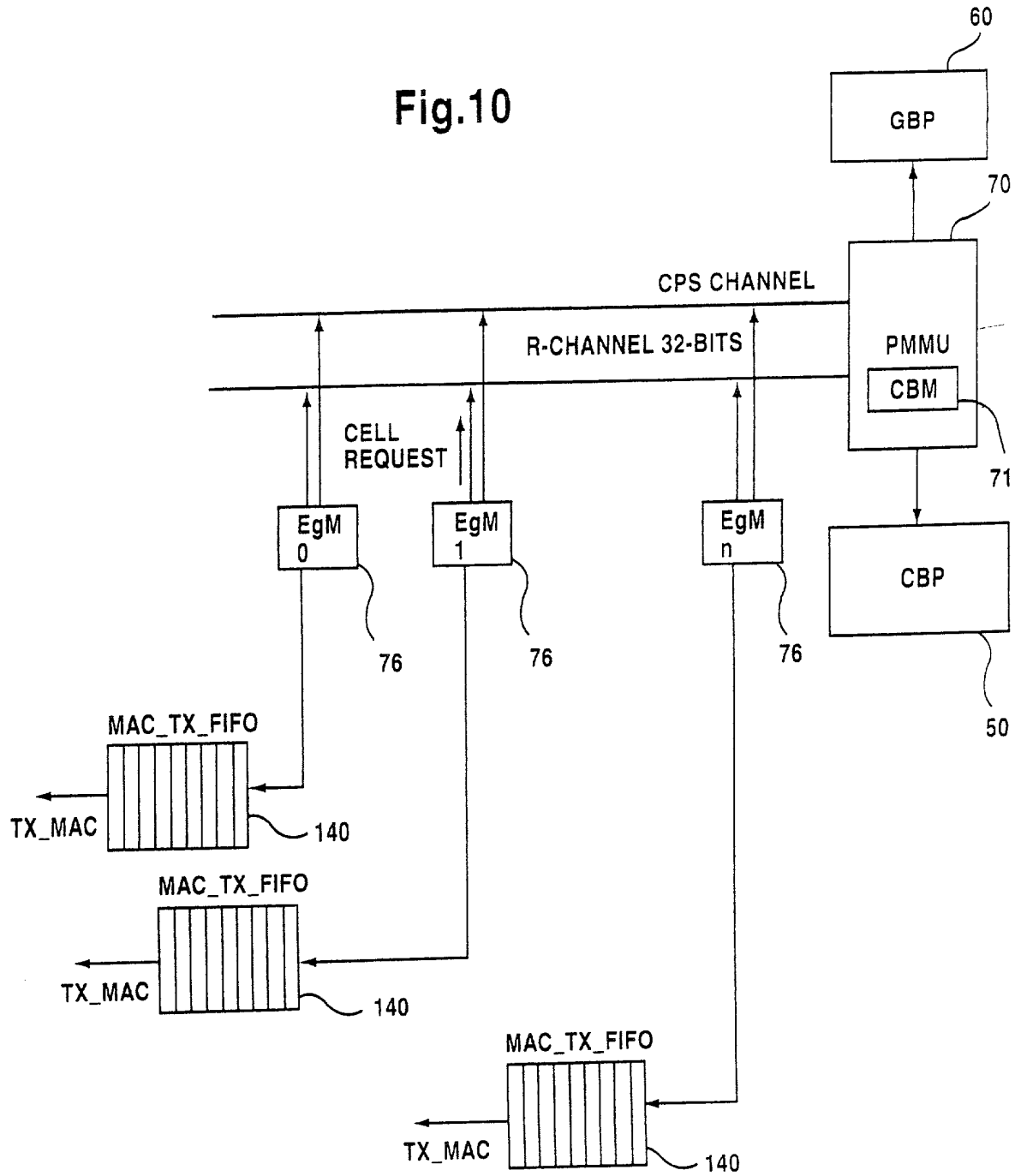


Fig.11

|          |   |
|----------|---|
| LINE 0 → | FC LC BC/MC CPY_CNT(5b) CELL_LENGTH(7b) CRC(2b) NC_HEADER(16b) SRC_COUNT(6) IPX IP <br> TIME_STAMP(14b) O_BITS(2b) P NEXT_CELL_LEN(2b) CPU_OPCODE(4b) CELL_DATA(0-9B) |
| LINE 1 → | CELL_DATA(10-27) BYTES  |
| LINE 2 → | CELL_DATA(28-45) BYTES  |
| LINE 3 → | CELL_DATA(46-63) BYTES  |

Fig.12

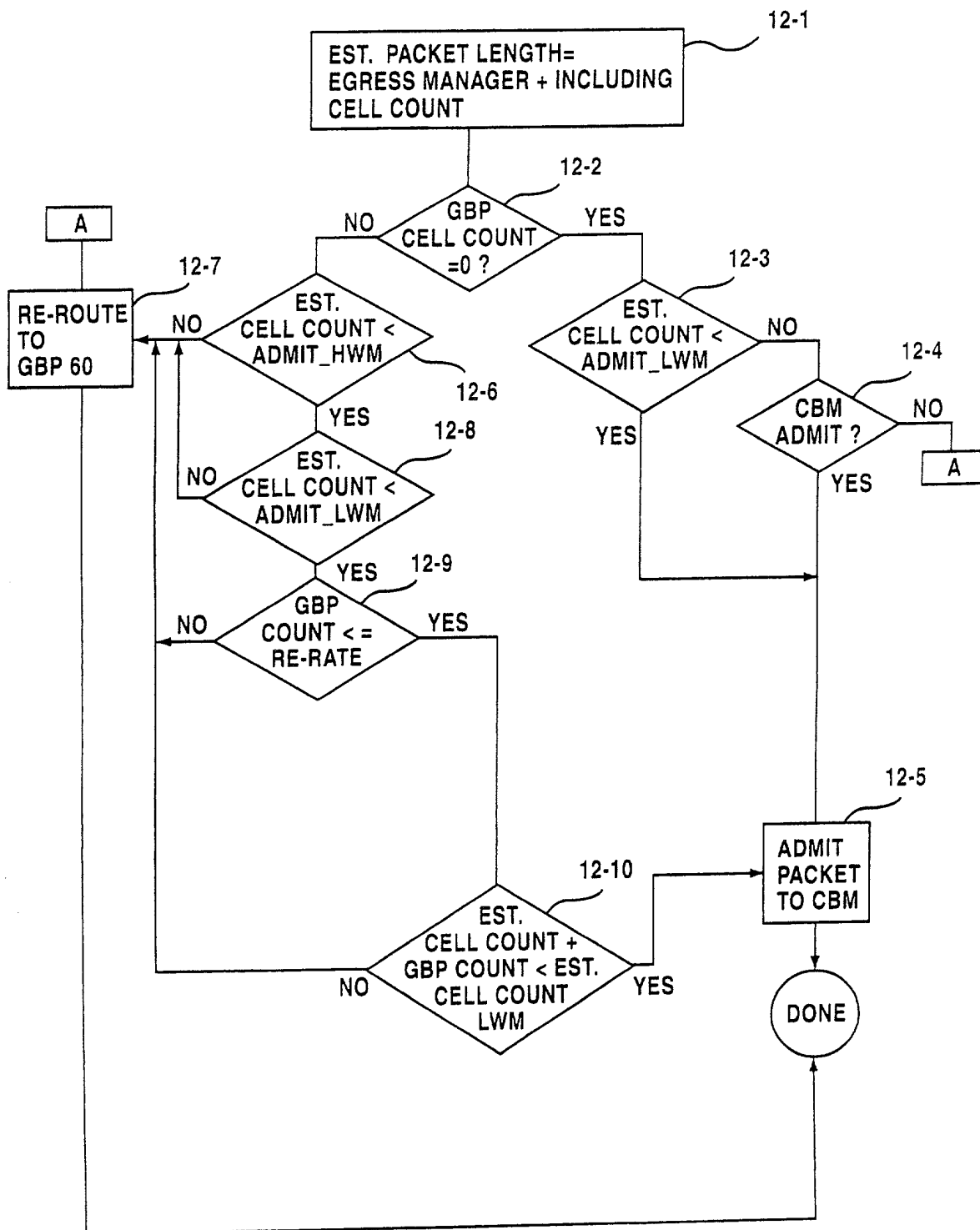


FIG. 12

Fig.13

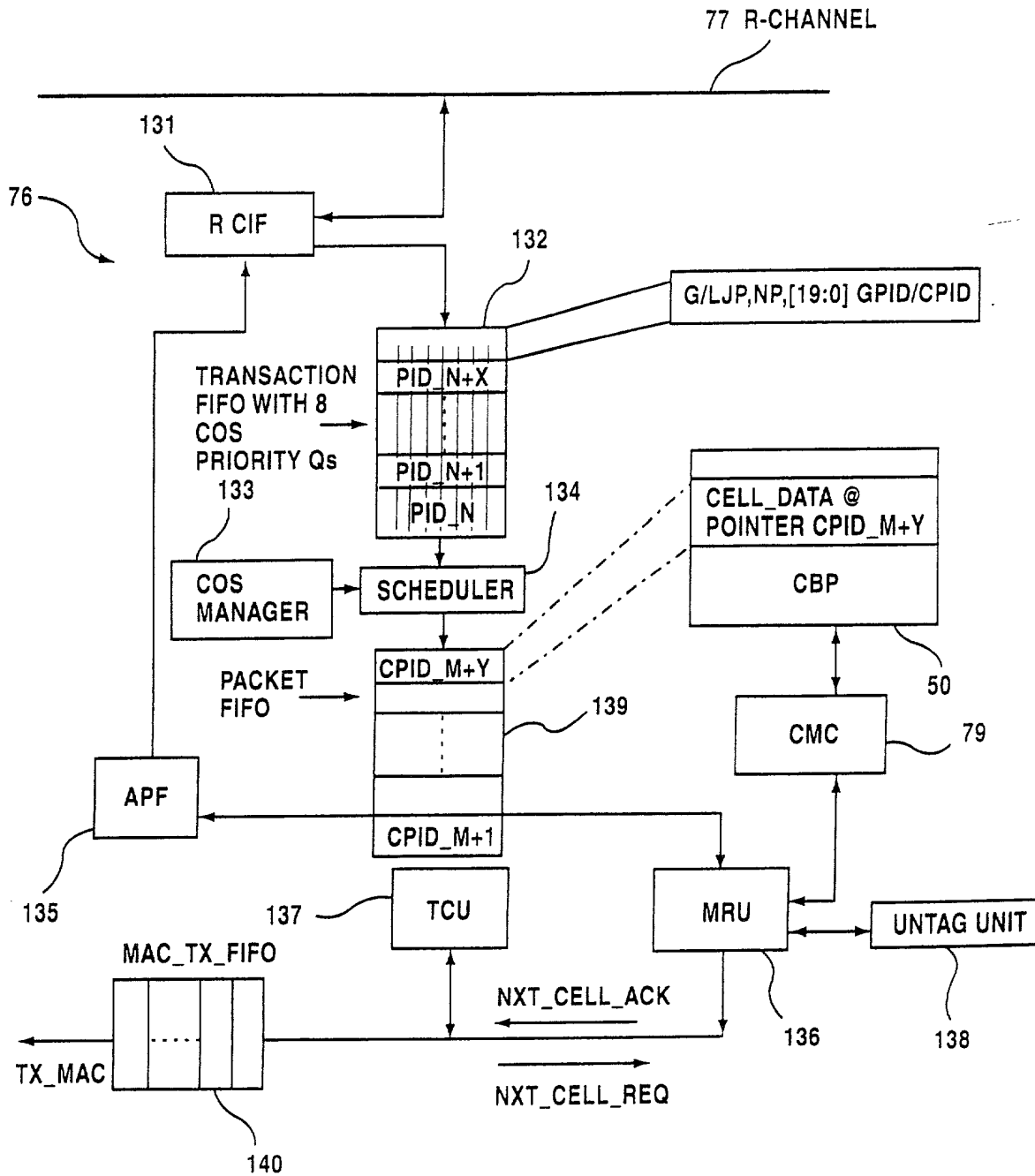


Fig.14

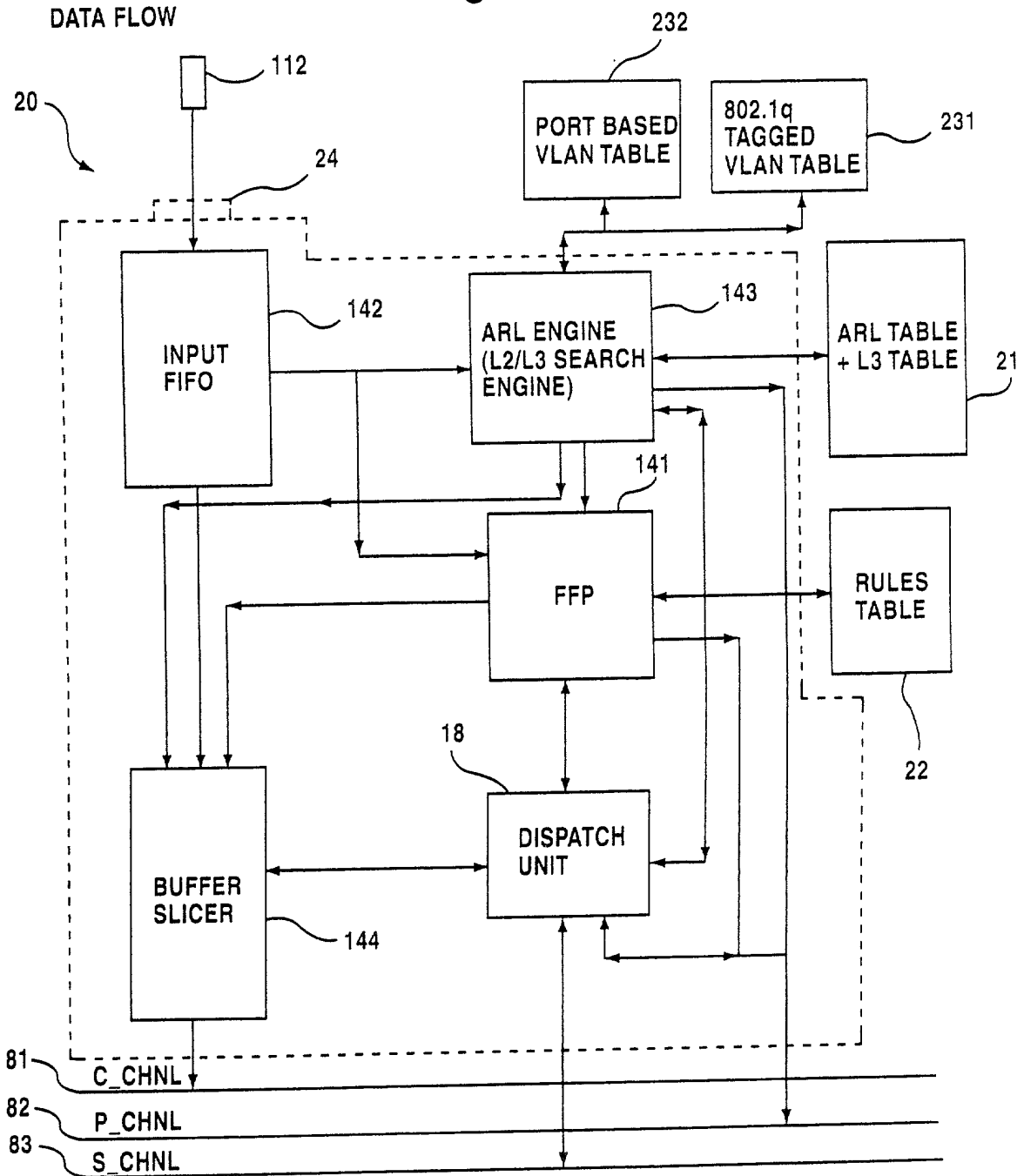
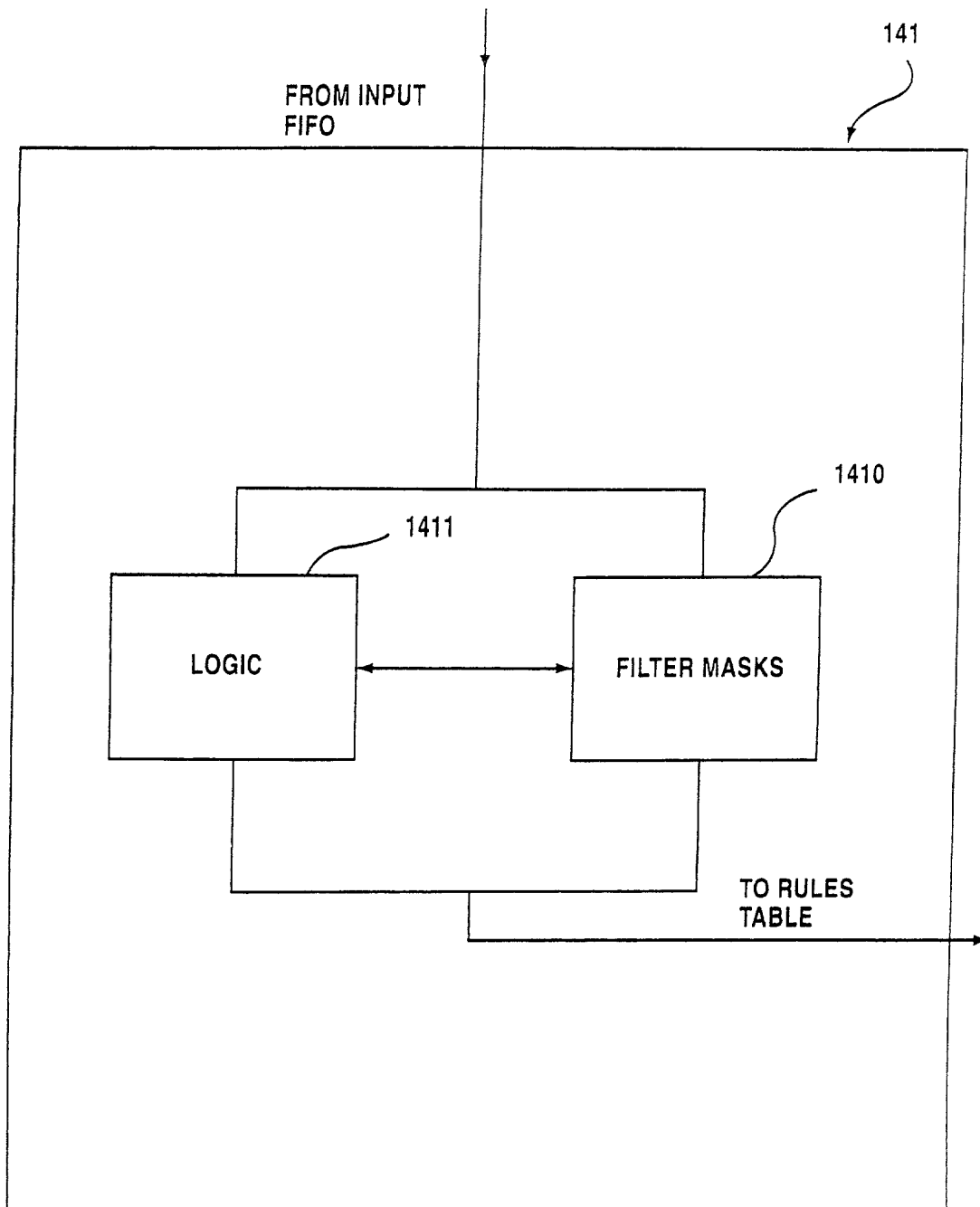


Fig.15



**Fig.16**

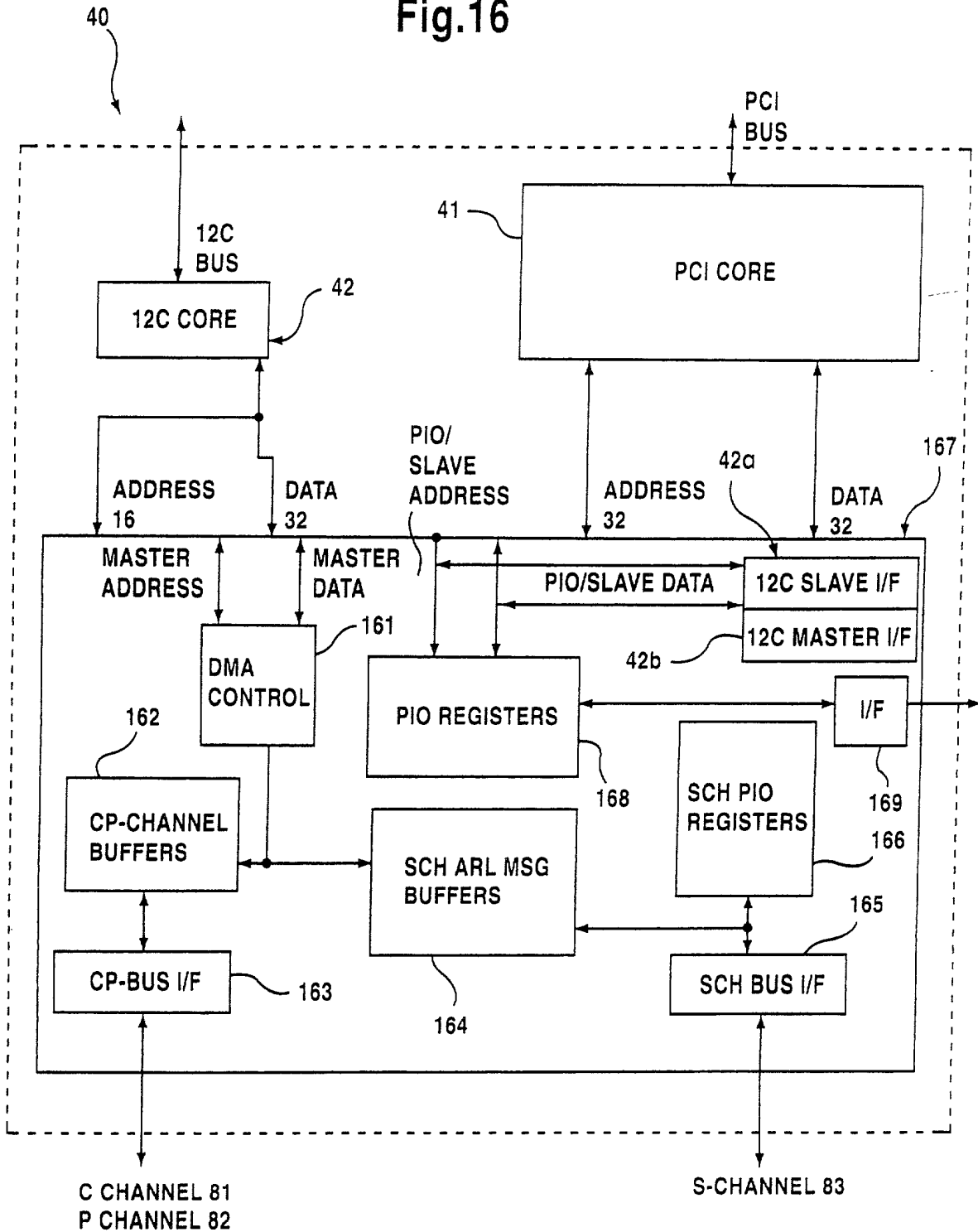




Fig.17

FFP PROGRAMMING FLOW CHART

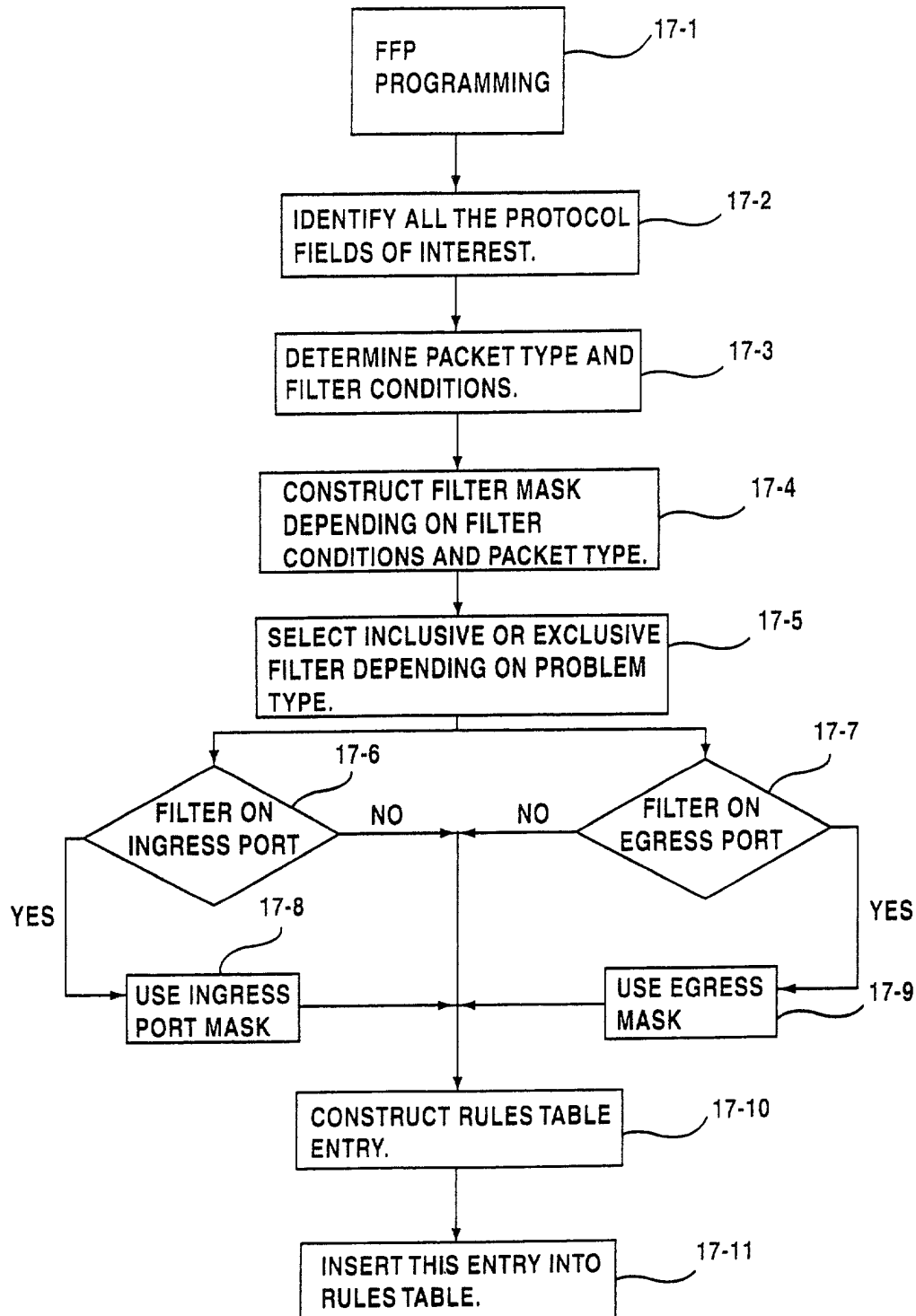


Fig.18

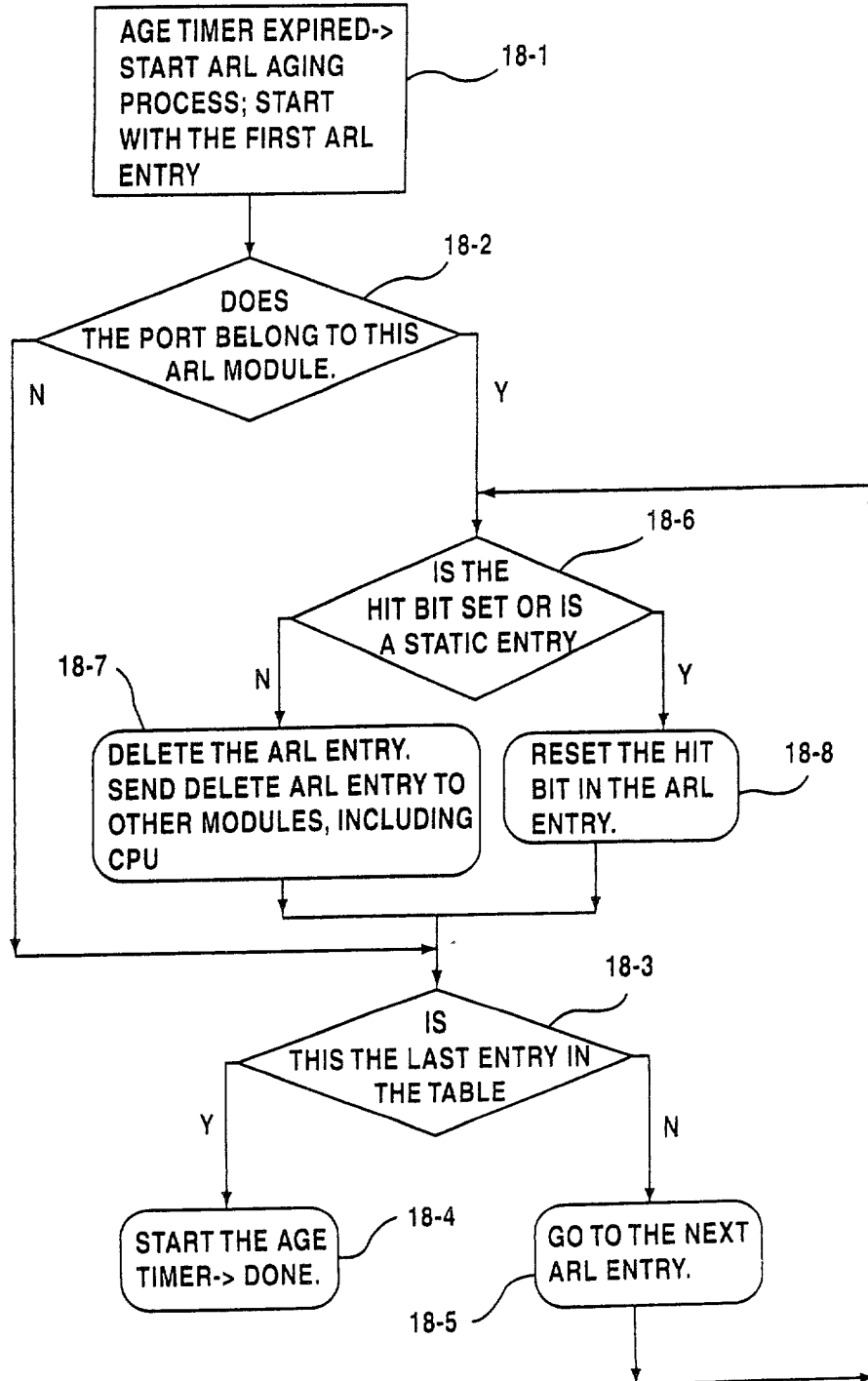


Fig.19

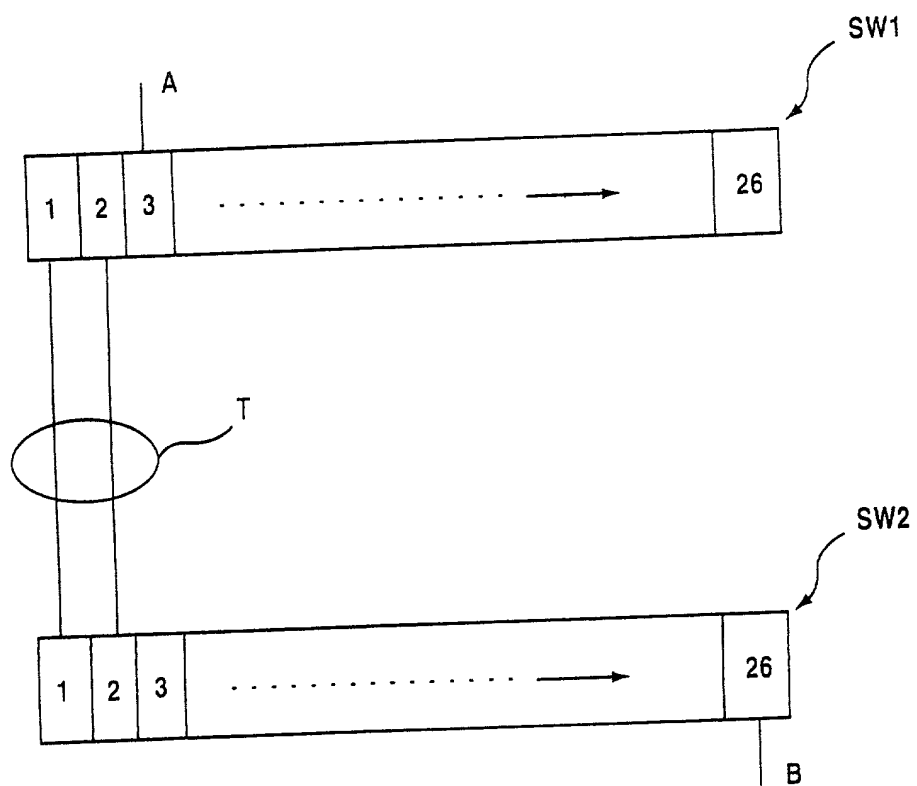


Fig.20

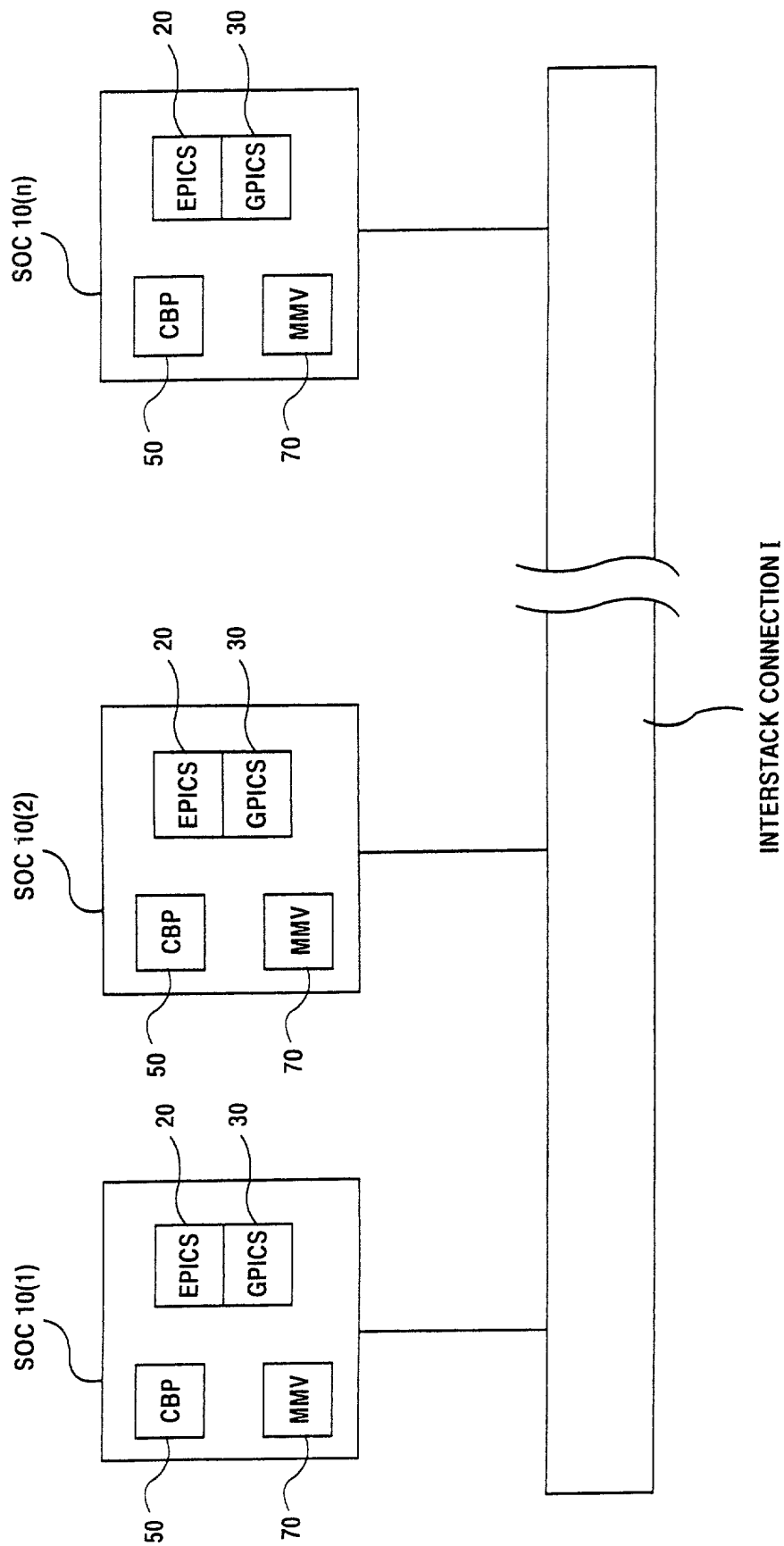


Fig.21

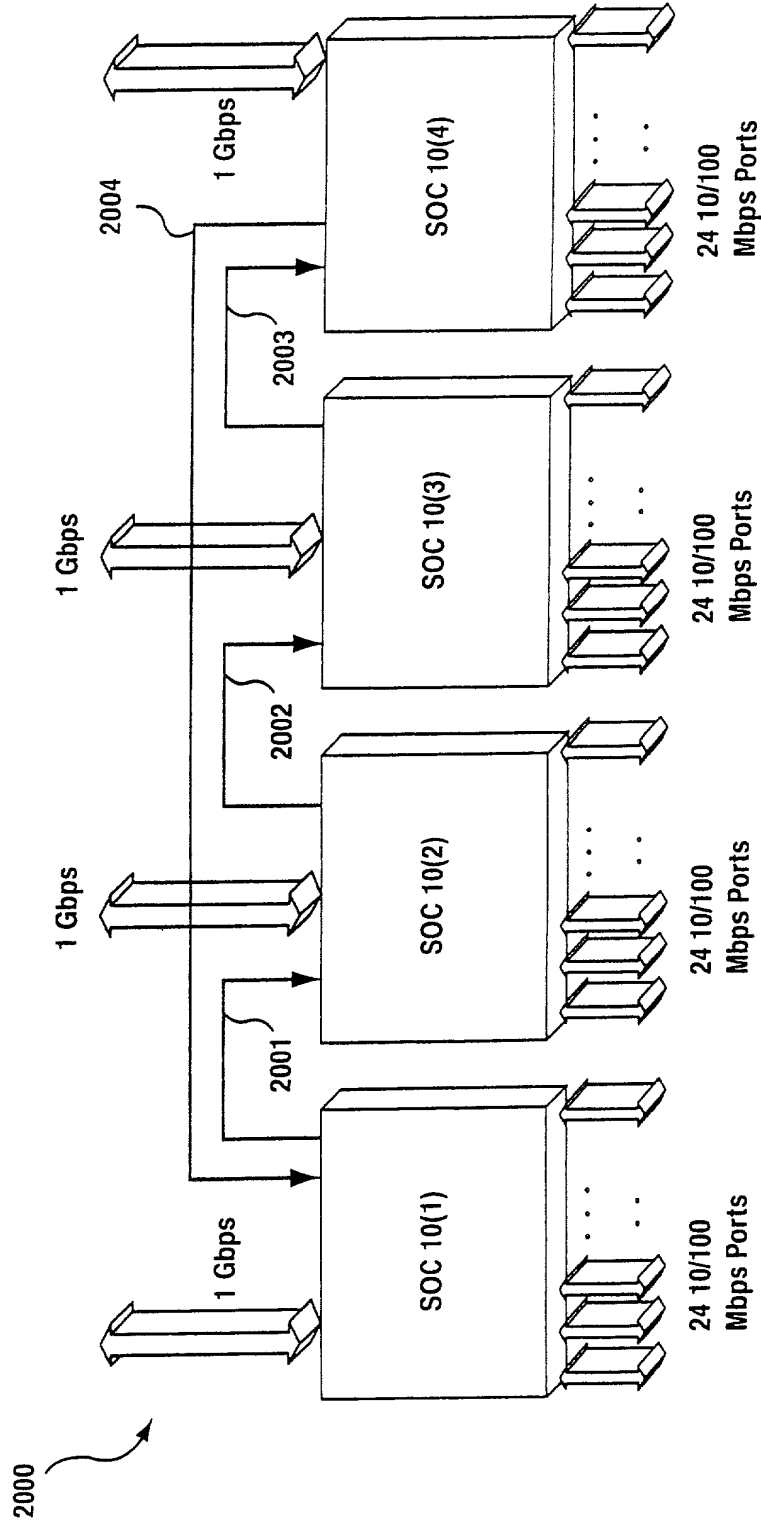


Fig.22

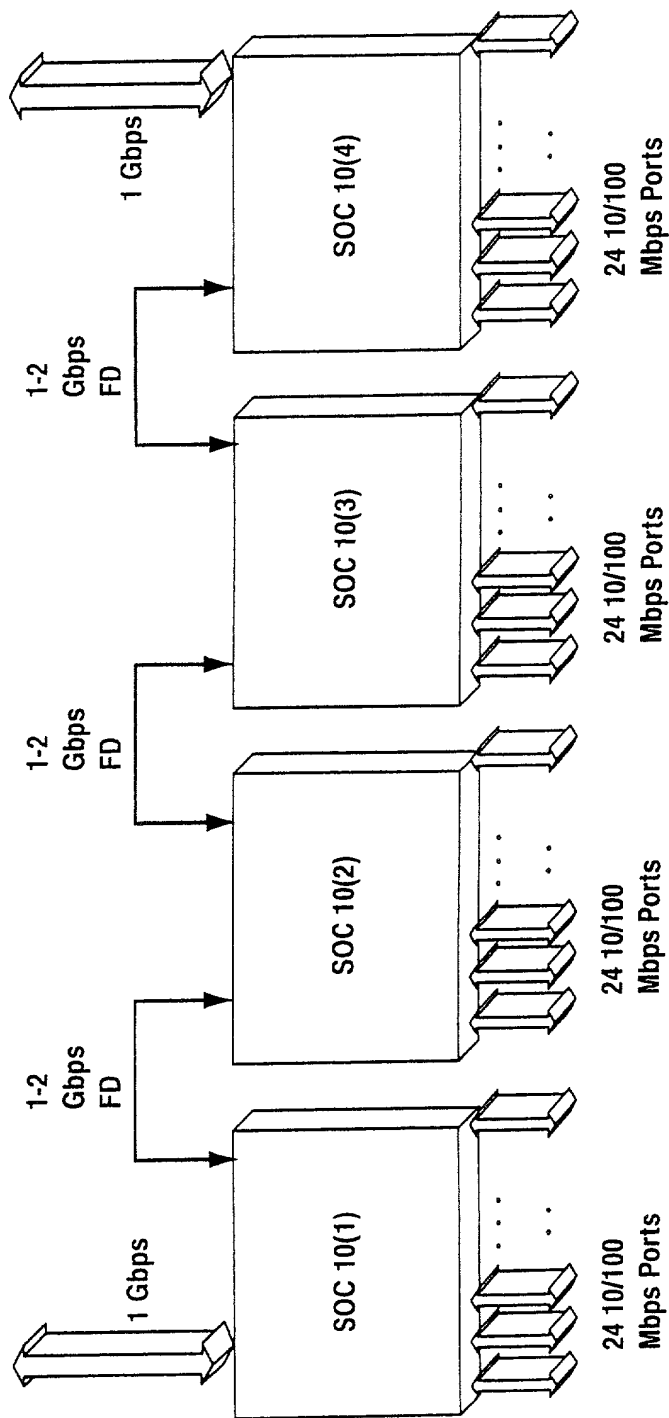
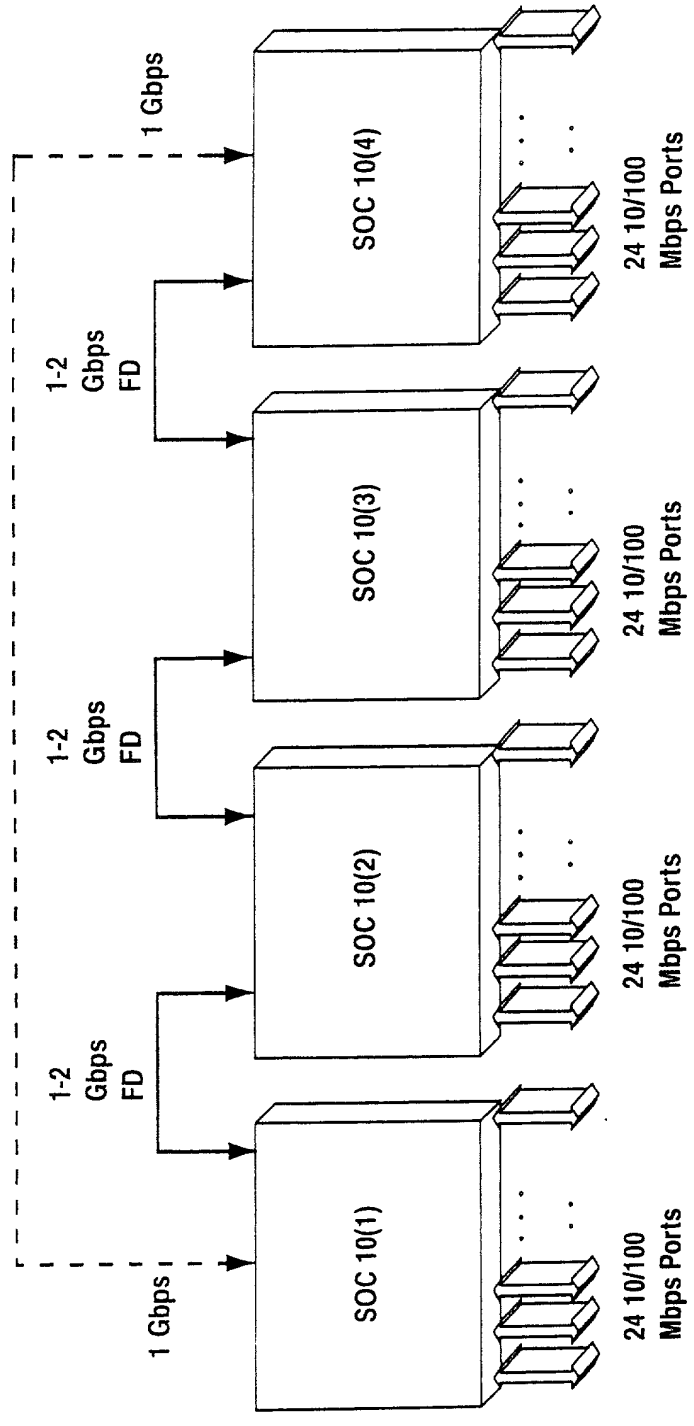


Fig.23



TOP SECRET 44603650

Fig.24A

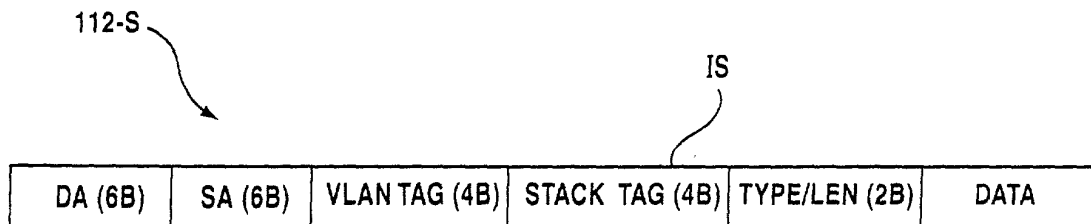


Fig.24B

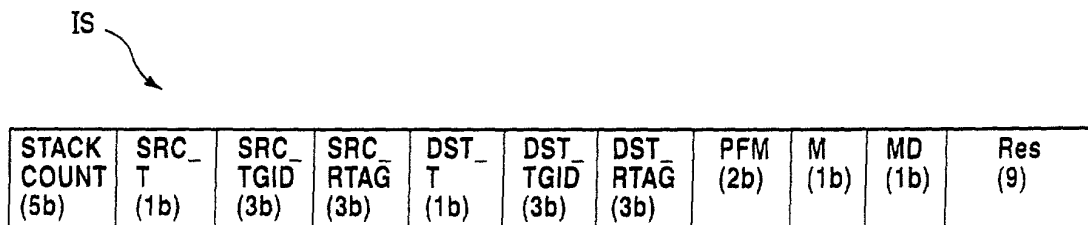




Fig.25

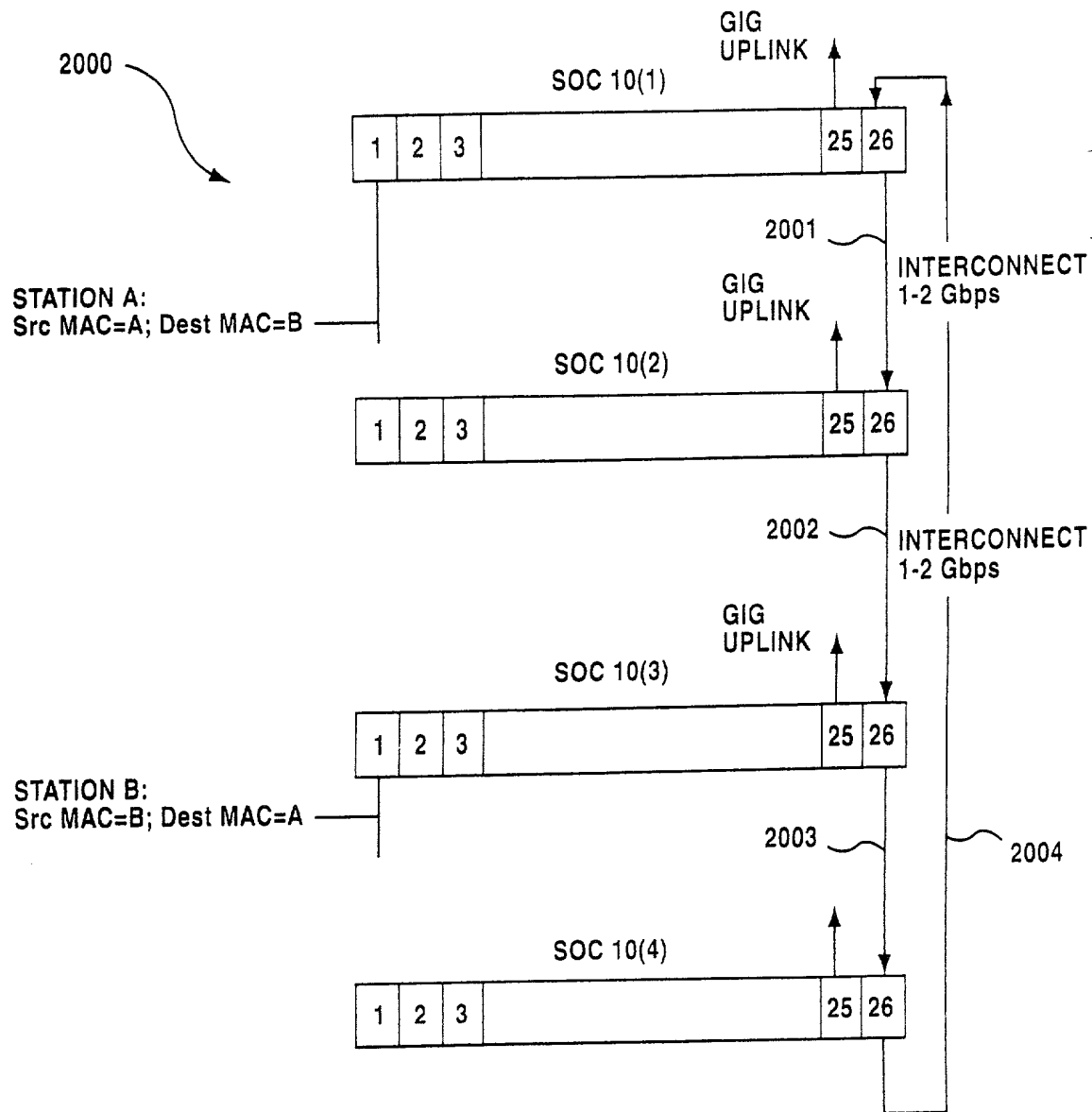


Fig.26

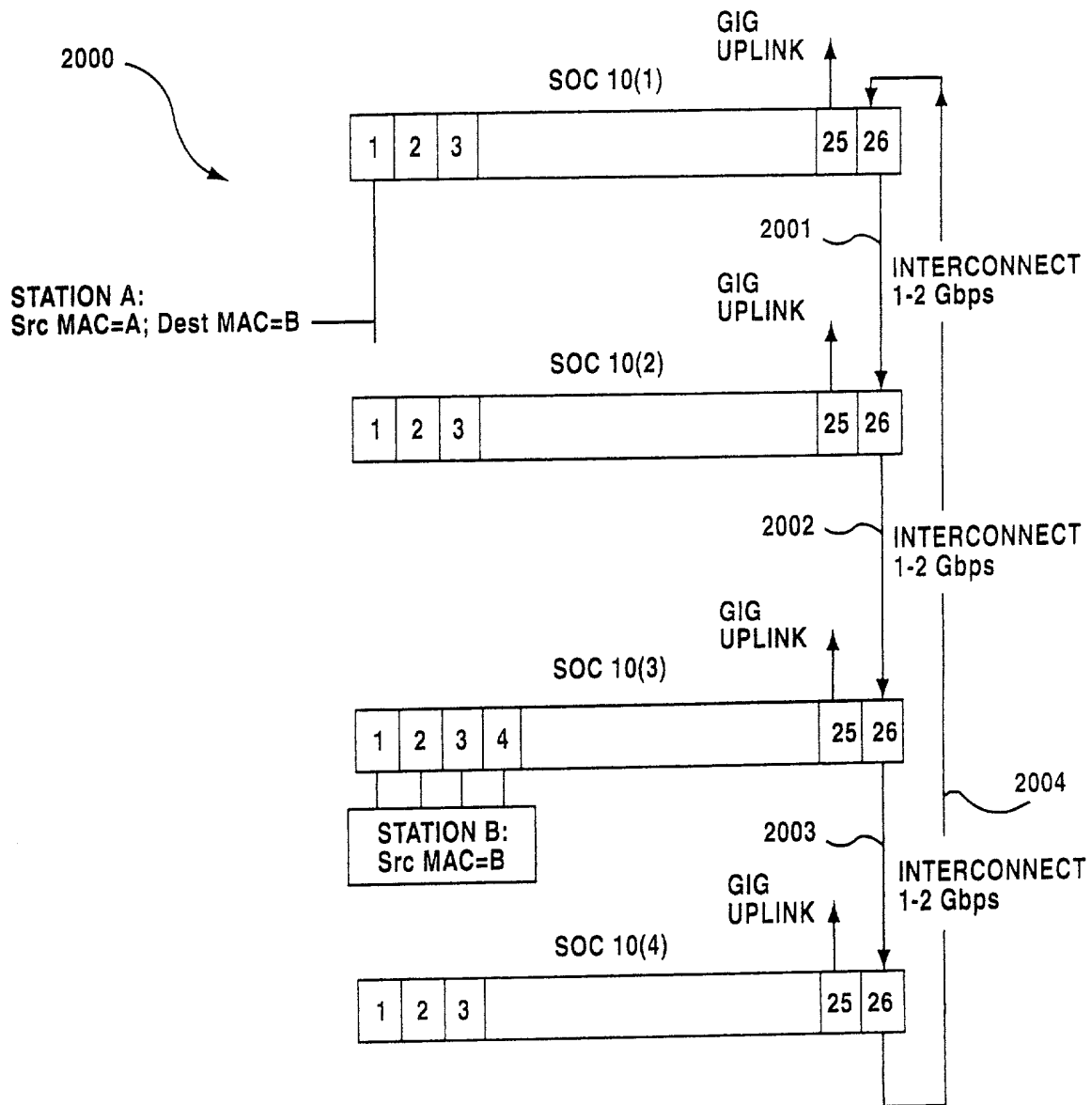


Fig.27A

| PORT<br>NUMBER | MAC<br>ADDRESS | VLAN ID | T | TGID | RTAG |
|----------------|----------------|---------|---|------|------|
| 1              | A              | 1       | 0 | X    | X    |
| 26             | B              | 1       | 1 | 2    | 2    |

Fig.27B

| PORT<br>NUMBER | MAC<br>ADDRESS | VLAN ID | T | TGID | RTAG |
|----------------|----------------|---------|---|------|------|
| 26             | A              | 1       | 0 | X    | X    |
| 26             | B              | 1       | 1 | 2    | 2    |

Fig.27C

| PORT<br>NUMBER | MAC<br>ADDRESS | VLAN ID | T | TGID | RTAG |
|----------------|----------------|---------|---|------|------|
| 26             | A              | 1       | 0 | X    | X    |
| 1              | B              | 1       | 1 | 2    | 2    |

Fig.27D

| PORT<br>NUMBER | MAC<br>ADDRESS | VLAN ID | T | TGID | RTAG |
|----------------|----------------|---------|---|------|------|
| 26             | A              | 1       | 0 | X    | X    |
| 26             | B              | 1       | 1 | 2    | 2    |

Fig.28

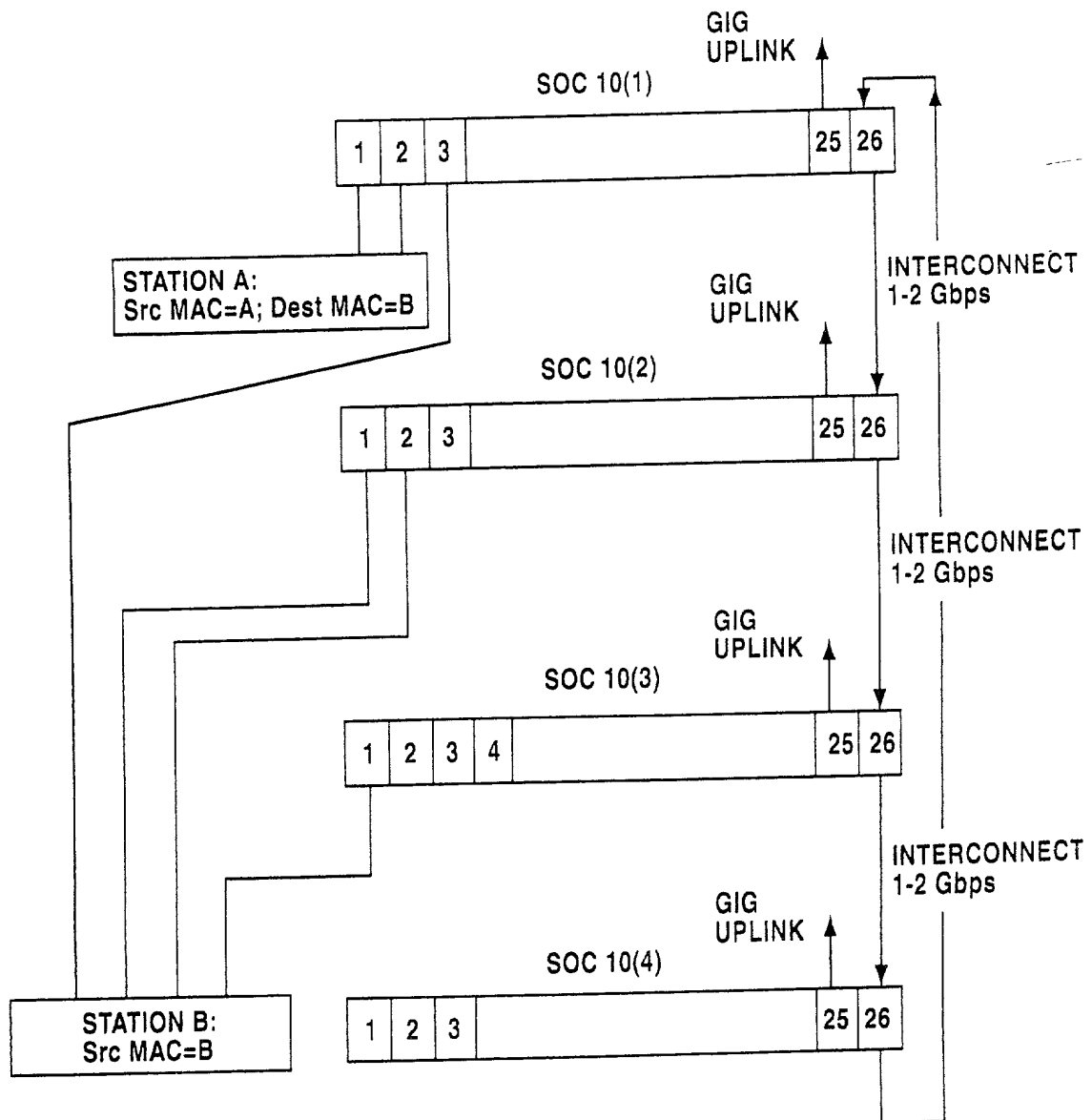


Fig.29A

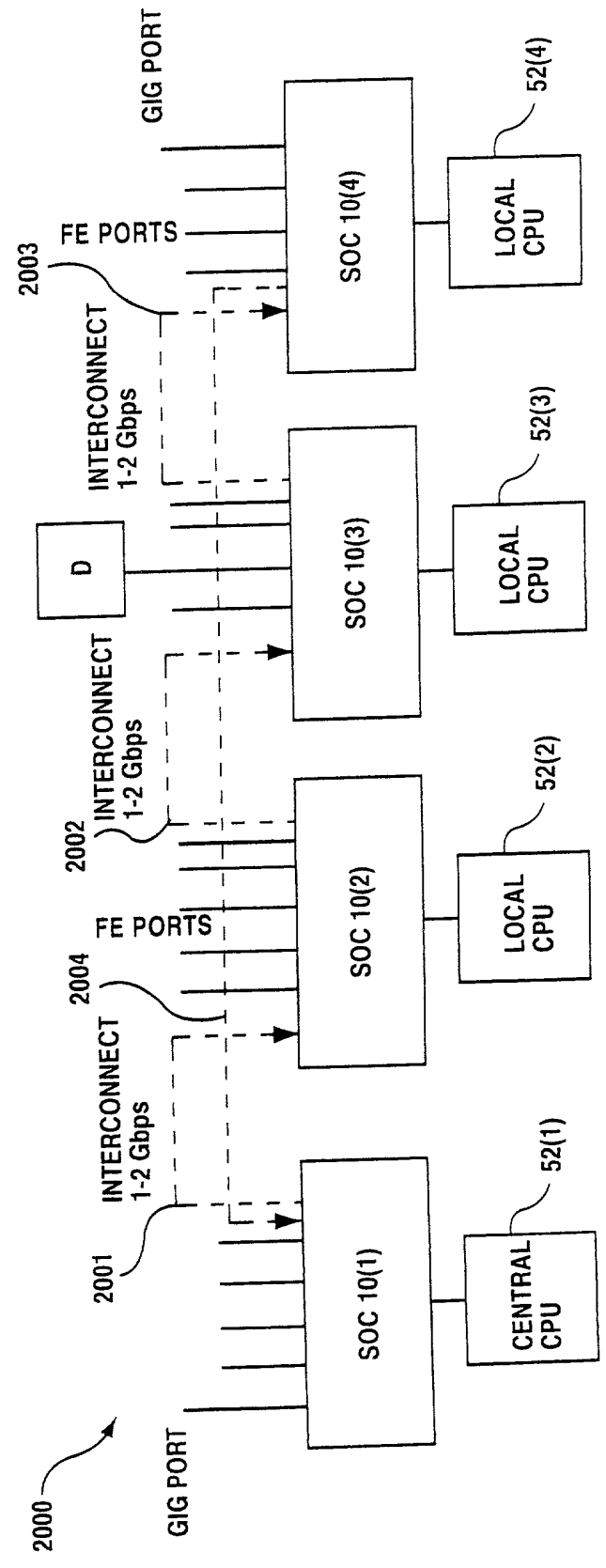


FIG.29B

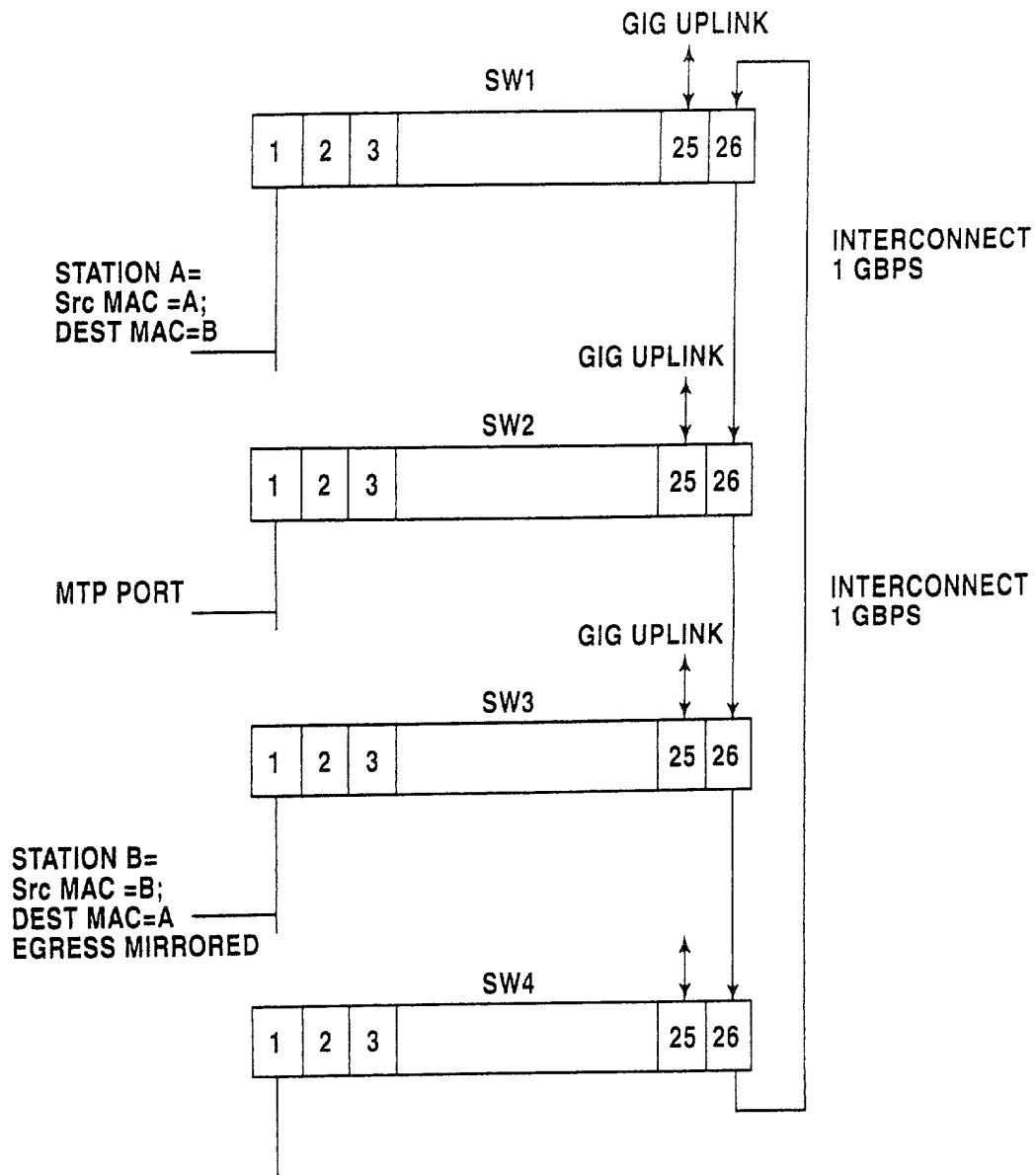


FIG.29C

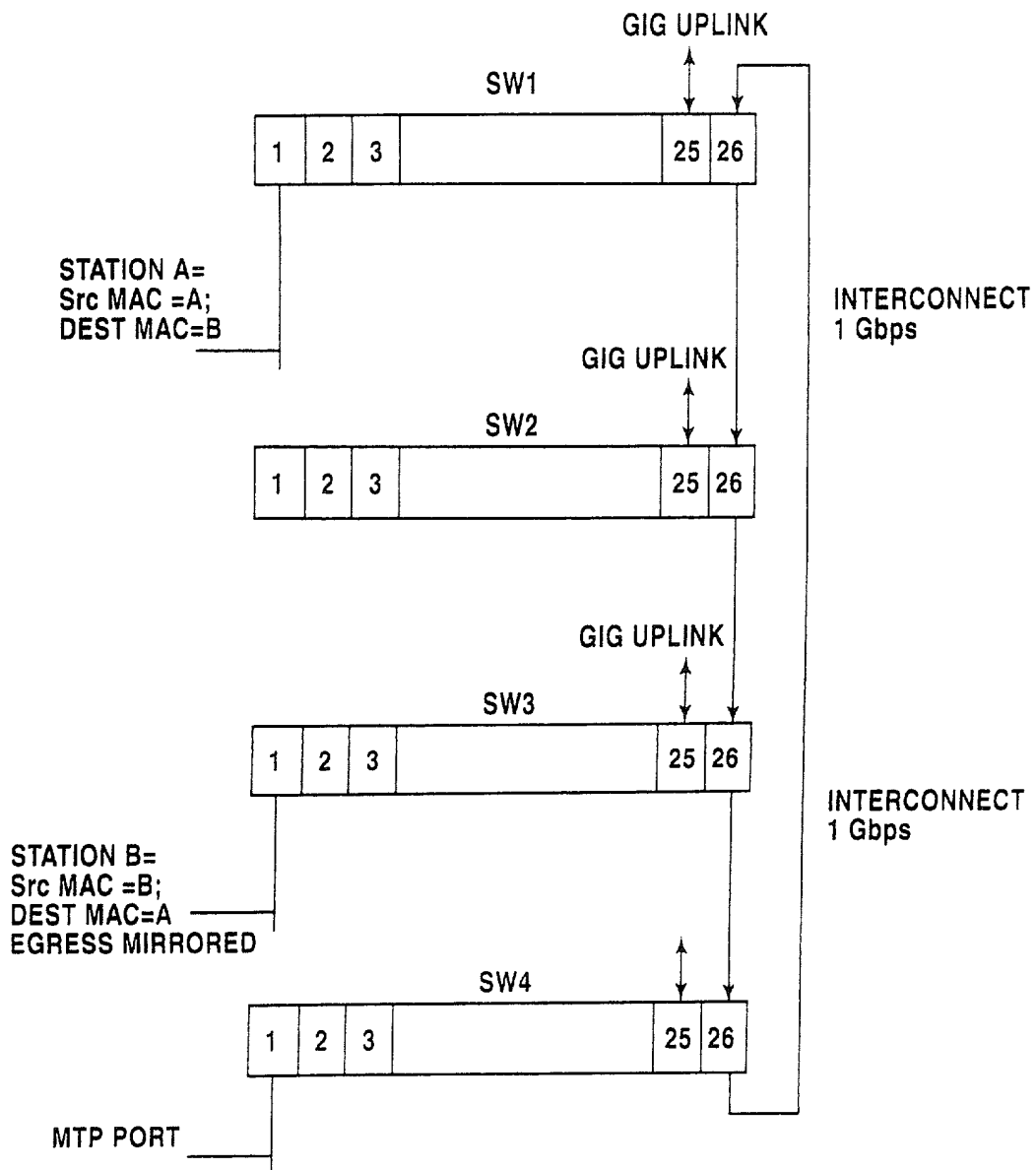
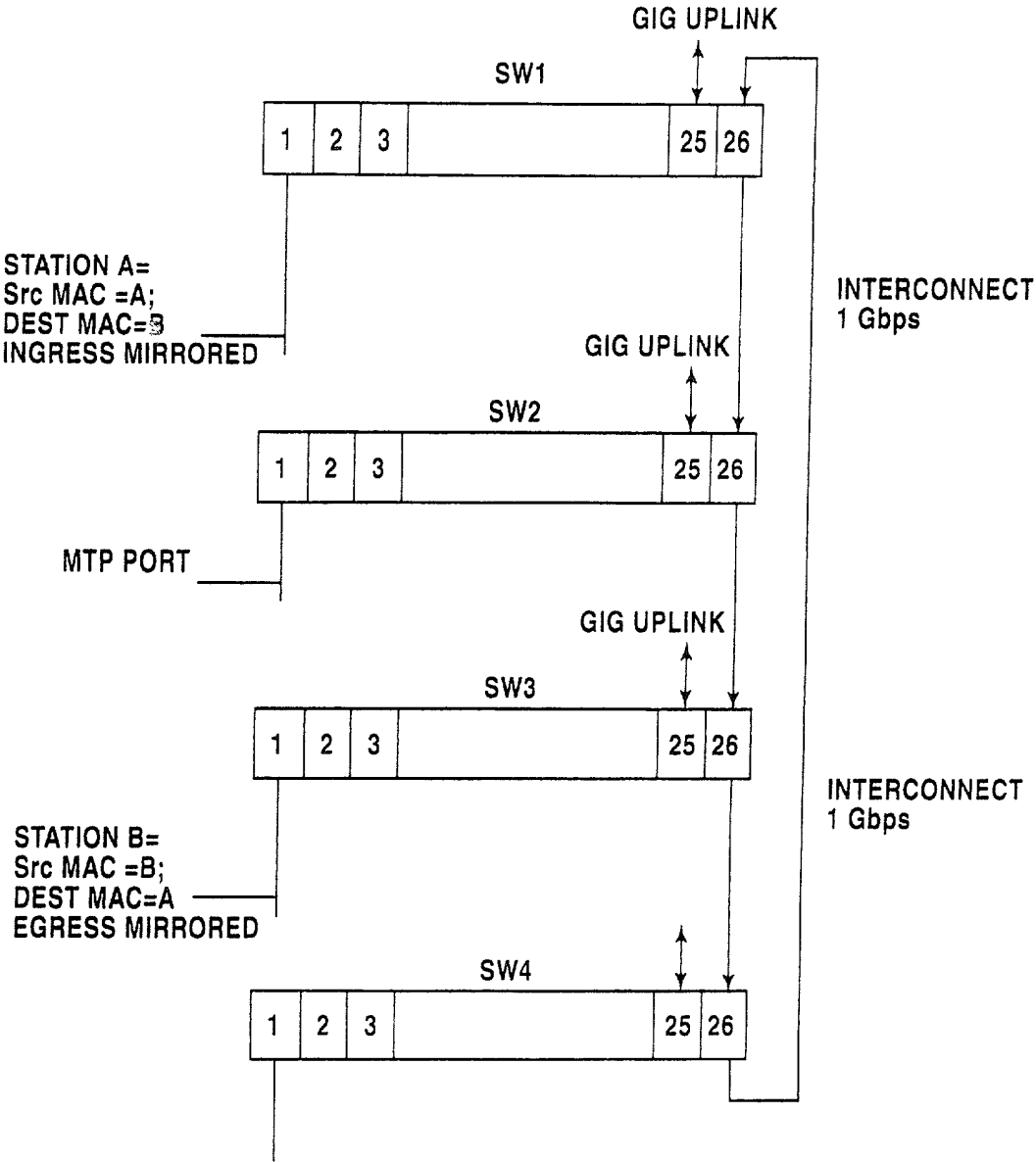


FIG.29D



092044-10501



FIG.29E

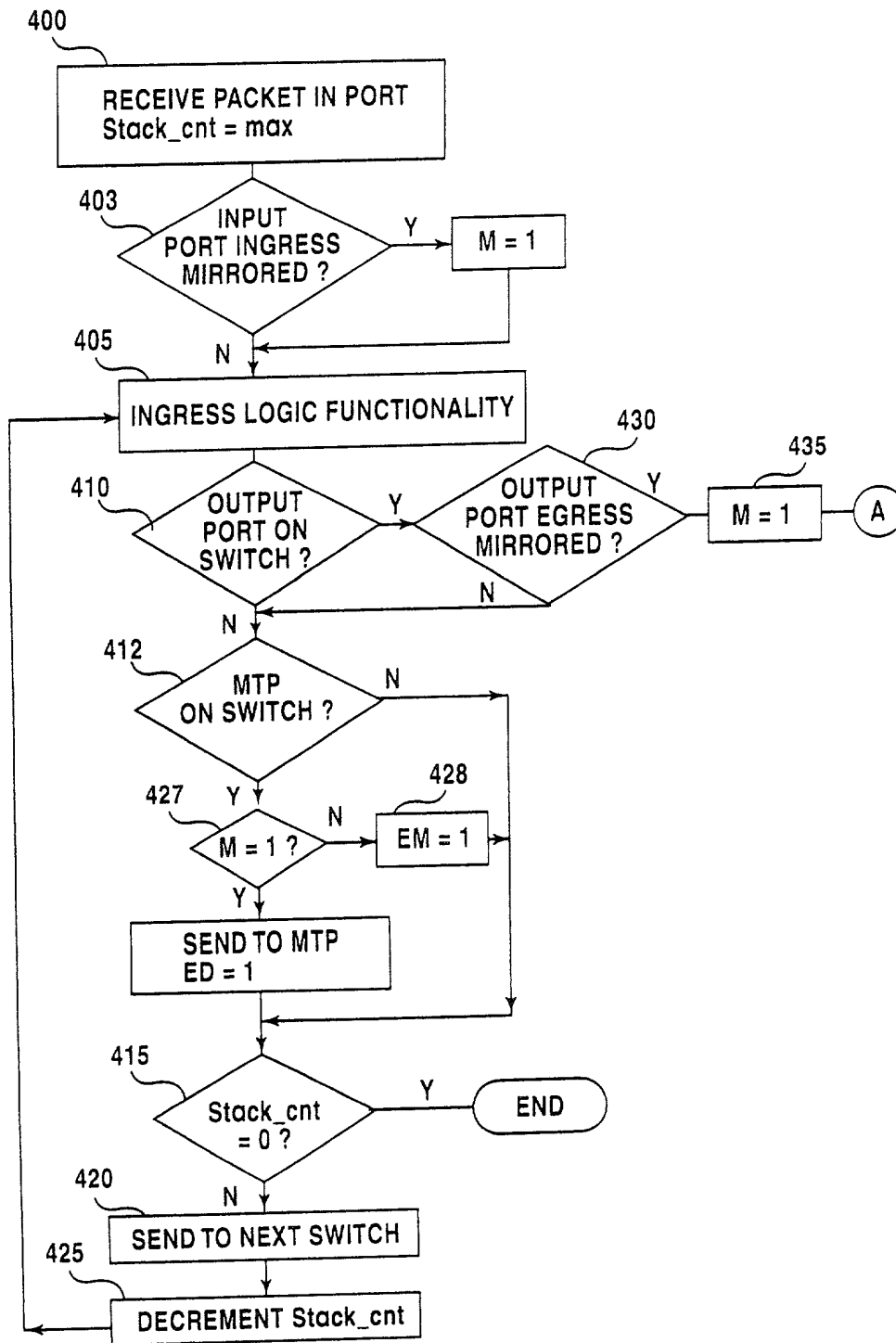


FIG.29F

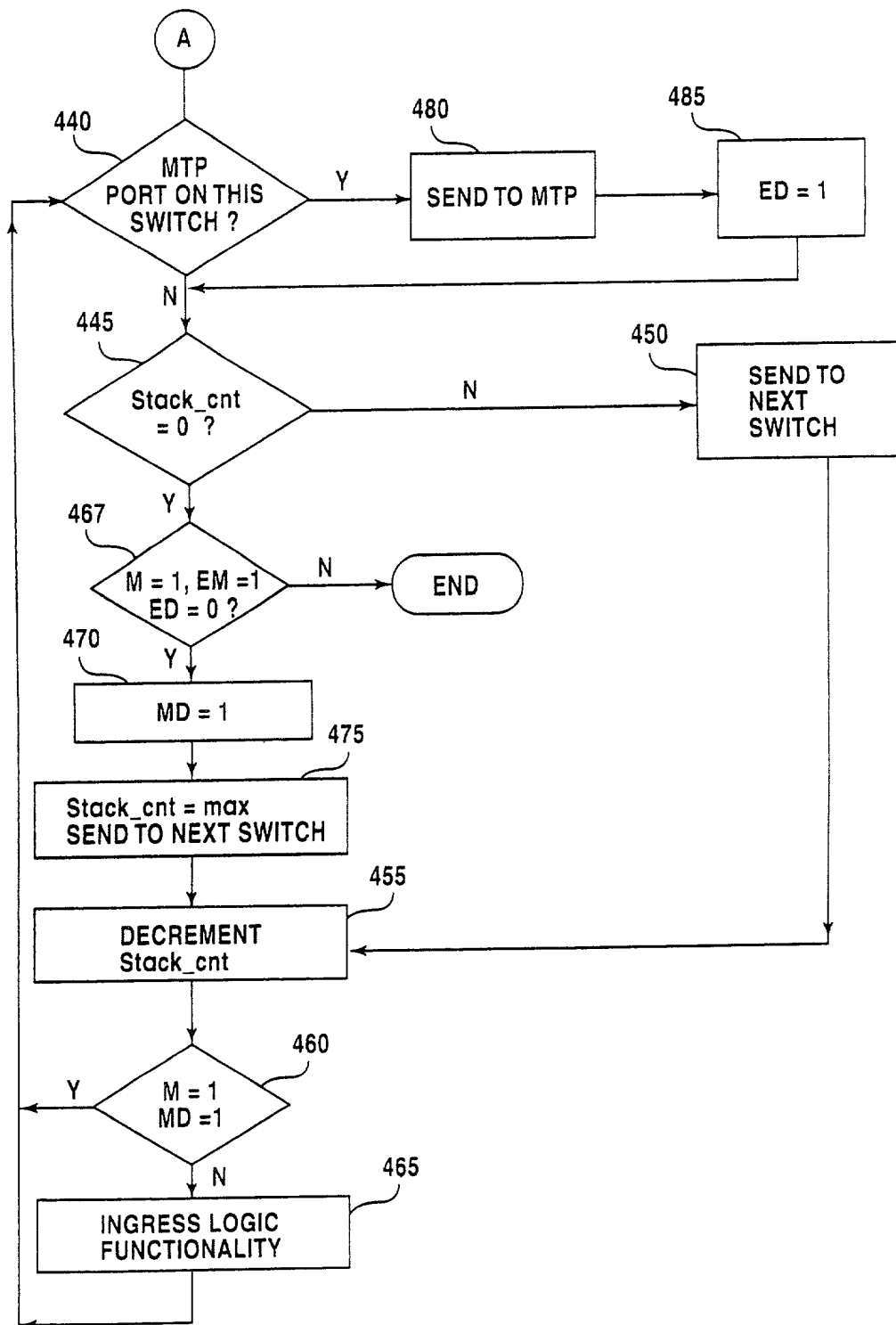


FIG.29G

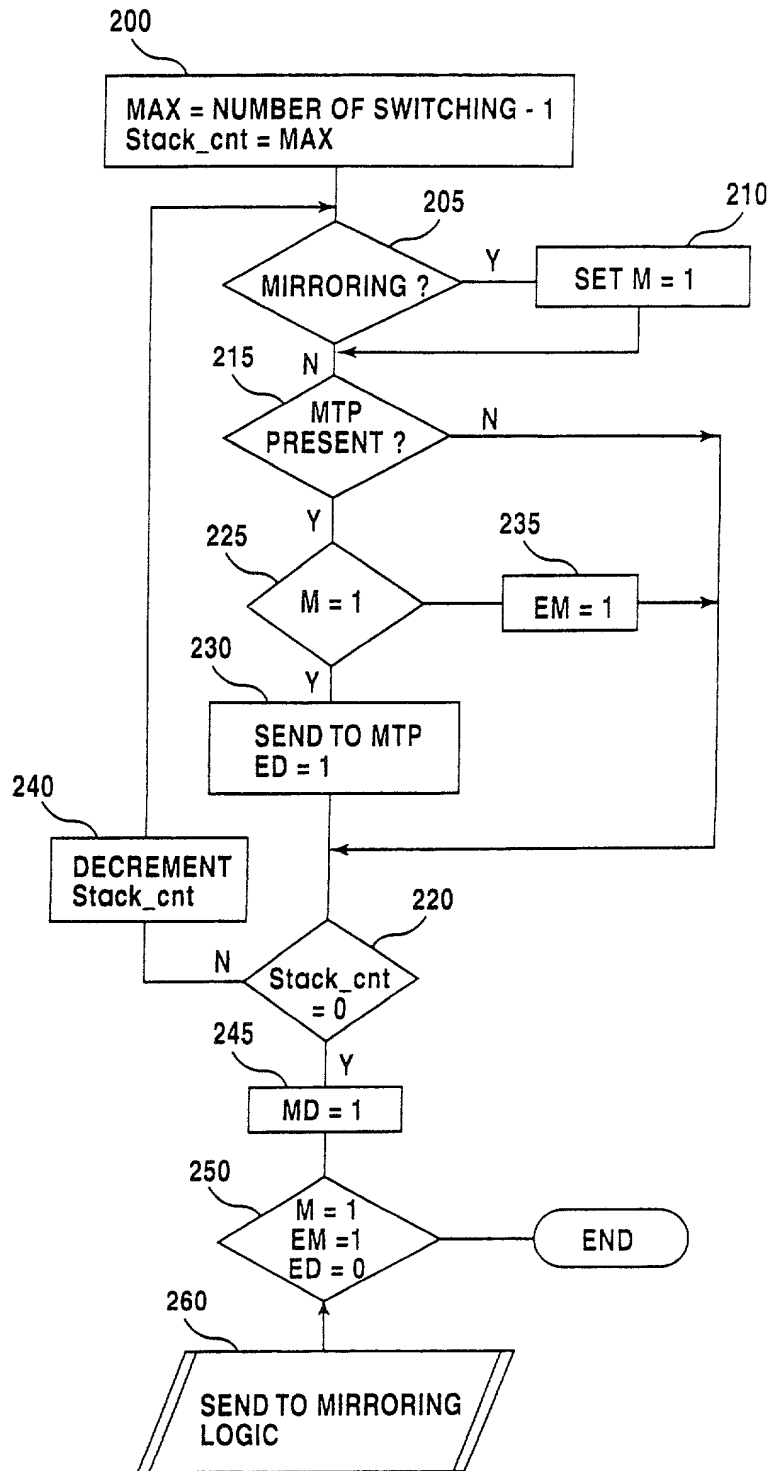
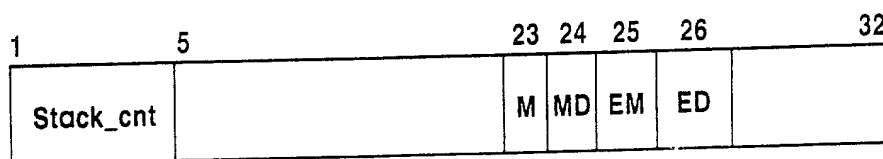


FIG.29H



05920944-10804  
T080T-4462660

Fig.30

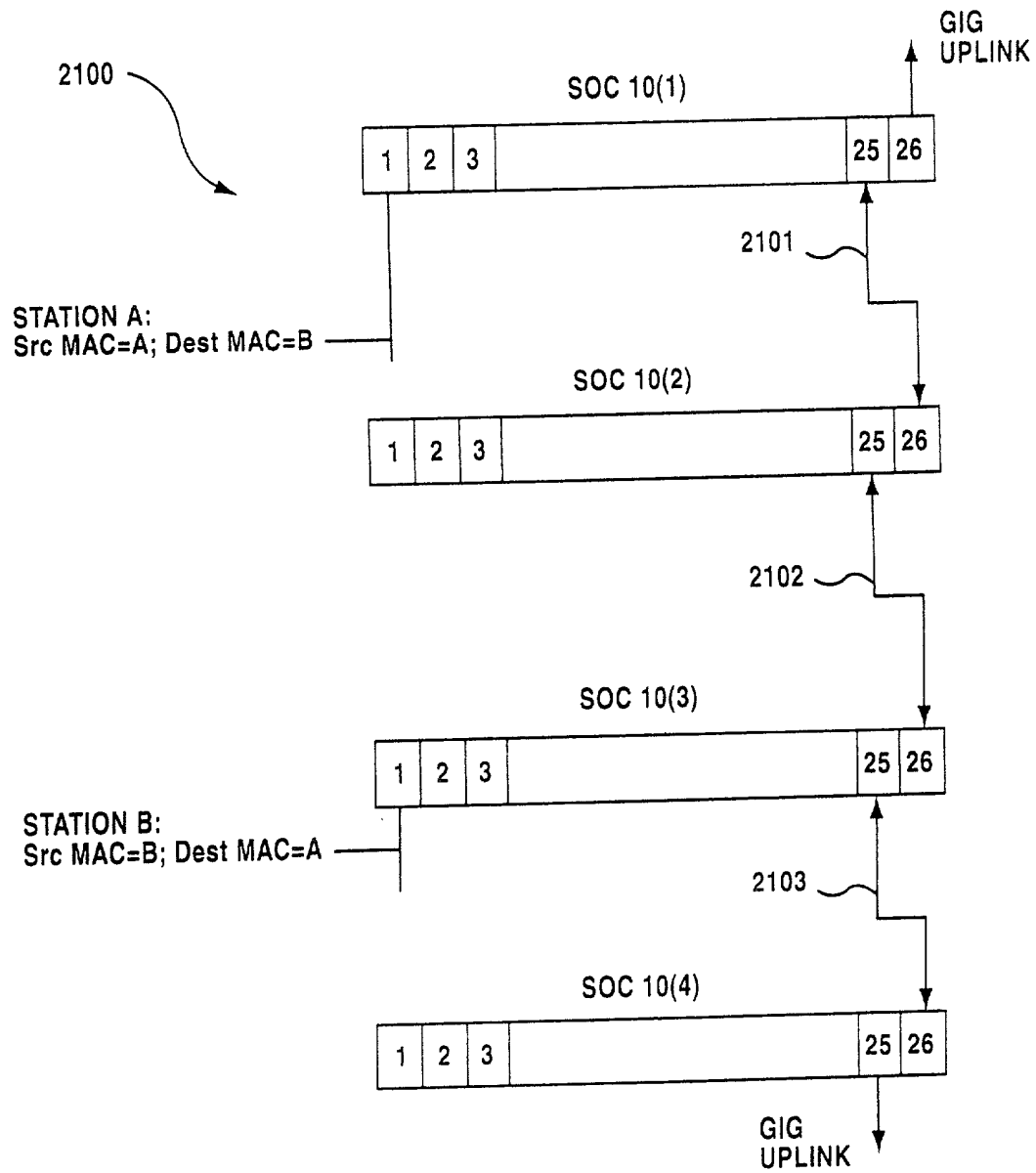
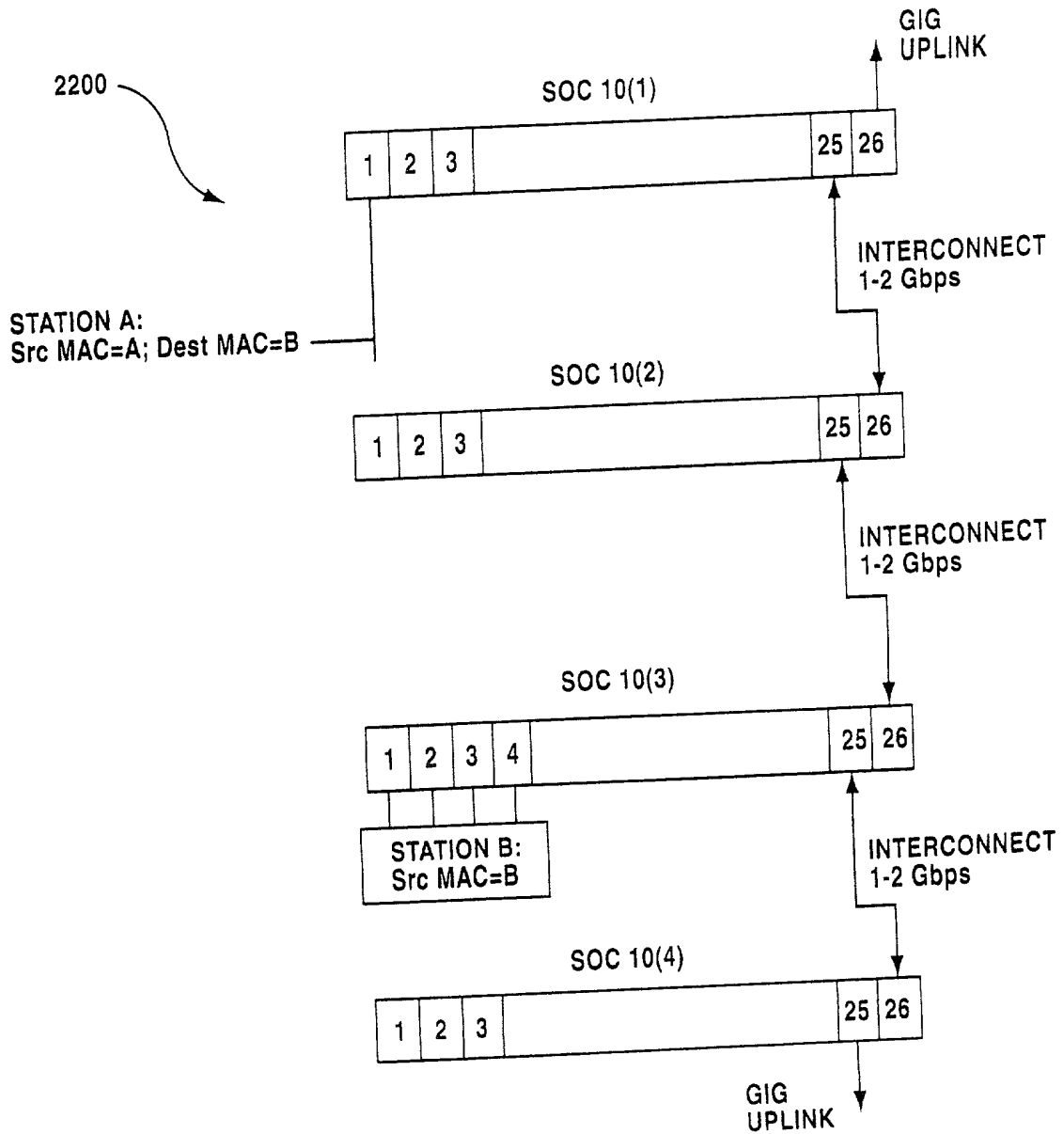


Fig.31



**Fig.32A**

| PORT<br>NUMBER | MAC<br>ADDRESS | VLAN ID | T | TGID | RTAG |
|----------------|----------------|---------|---|------|------|
| 1              | A              | 1       | 0 | X    | X    |
| 25             | B              | 1       | 1 | 2    | 2    |

**Fig.32B**

| PORT<br>NUMBER | MAC<br>ADDRESS | VLAN ID | T | TGID | RTAG |
|----------------|----------------|---------|---|------|------|
| 26             | A              | 1       | 0 | X    | X    |
| 25             | B              | 1       | 1 | 2    | 2    |

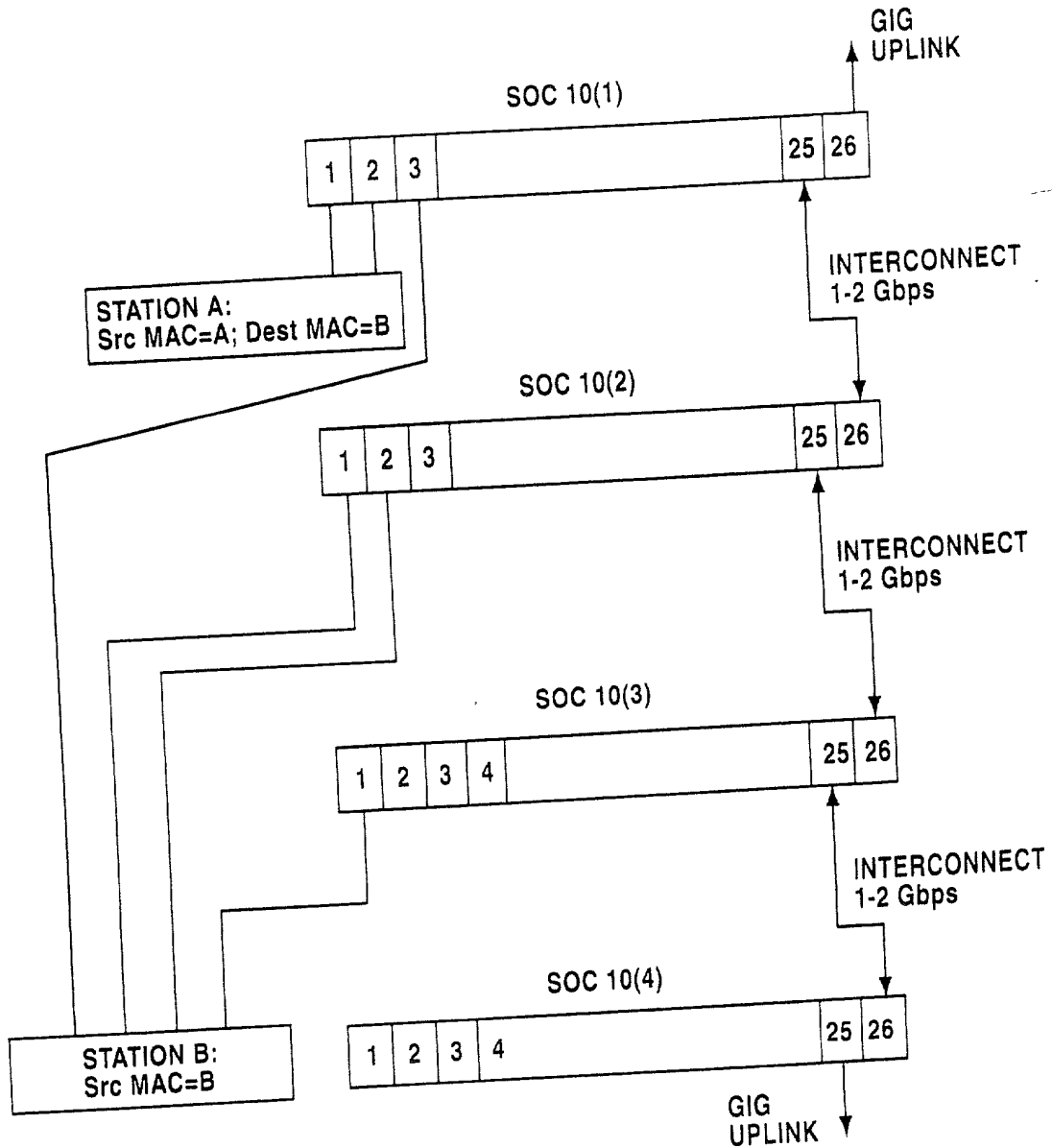
**Fig.32C**

| PORT<br>NUMBER | MAC<br>ADDRESS | VLAN ID | T | TGID | RTAG |
|----------------|----------------|---------|---|------|------|
| 26             | A              | 1       | 0 | X    | X    |
| 1              | B              | 1       | 1 | 2    | 2    |

**Fig.32D**

| PORT<br>NUMBER | MAC<br>ADDRESS | VLAN ID | T | TGID | RTAG |
|----------------|----------------|---------|---|------|------|
| 26             | A              | 1       | 0 | X    | X    |
|                |                |         |   |      |      |

Fig.33



DocId: 44602660



Fig.34A

| PORT<br>NUMBER | MAC<br>ADDRESS | VLAN ID | T | TGID | RTAG |
|----------------|----------------|---------|---|------|------|
| 1              | A              | 1       | 1 | 1    | 1    |
| 25             | B              | 1       | 1 | 2    | 2    |

Fig.34B

| PORT<br>NUMBER | MAC<br>ADDRESS | VLAN ID | T | TGID | RTAG |
|----------------|----------------|---------|---|------|------|
| 26             | A              | 1       | 1 | 1    | 1    |
| 25             | B              | 1       | 1 | 2    | 2    |

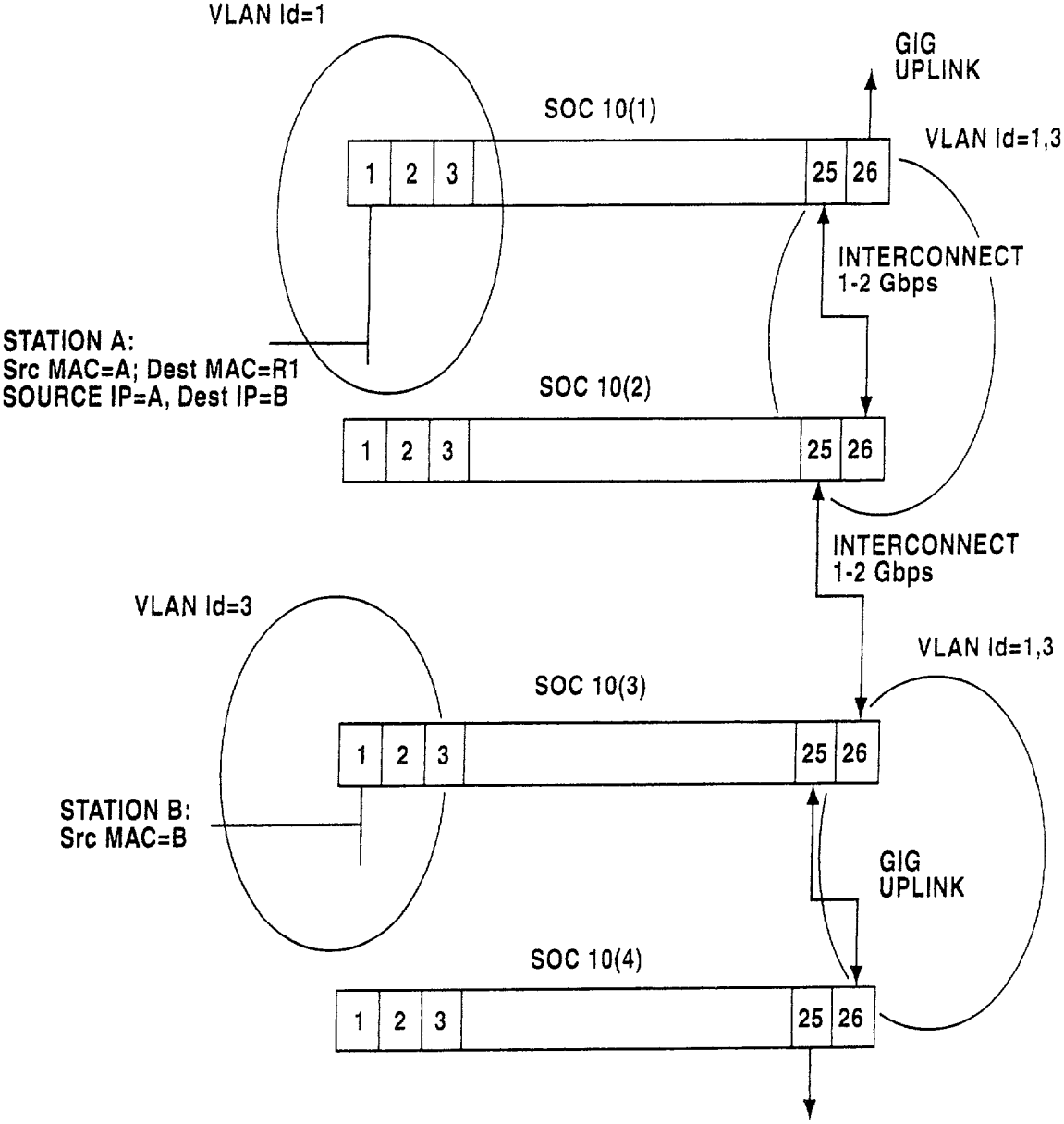
Fig.34C

| PORT<br>NUMBER | MAC<br>ADDRESS | VLAN ID | T | TGID | RTAG |
|----------------|----------------|---------|---|------|------|
| 26             | A              | 1       | 1 | 1    | 1    |
| 1              | B              | 1       | 1 | 2    | 2    |

Fig.34D

| PORT<br>NUMBER | MAC<br>ADDRESS | VLAN ID | T | TGID | RTAG |
|----------------|----------------|---------|---|------|------|
| 26             | A              | 1       | 1 | 1    | 1    |
|                |                |         |   |      |      |

Fig.35



**Fig.36**

**TRUNK GROUP TABLE FOR SW1:**

| TGID | TP0 | TP1 | TP2 | TP3 | TP4 | TP5 | TP6 | TP7 | TG<br>SIZE |
|------|-----|-----|-----|-----|-----|-----|-----|-----|------------|
| 2    | 25  | 25  | 25  | 25  | X   | X   | X   | X   | 4          |

**TRUNK GROUP TABLE FOR SW2:**

| TGID | TP0 | TP1 | TP2 | TP3 | TP4 | TP5 | TP6 | TP7 | TG<br>SIZE |
|------|-----|-----|-----|-----|-----|-----|-----|-----|------------|
| 2    | 25  | 25  | 25  | 25  | X   | X   | X   | X   | 4          |

**TRUNK GROUP TABLE FOR SW3:**

| TGID | TP0 | TP1 | TP2 | TP3 | TP4 | TP5 | TP6 | TP7 | TG<br>SIZE |
|------|-----|-----|-----|-----|-----|-----|-----|-----|------------|
| 2    | 1   | 2   | 3   | 4   | X   | X   | X   | X   | 4          |

**TRUNK GROUP TABLE FOR SW4:**

| TGID | TP0 | TP1 | TP2 | TP3 | TP4 | TP5 | TP6 | TP7 | TG<br>SIZE |
|------|-----|-----|-----|-----|-----|-----|-----|-----|------------|
| 2    | 26  | 26  | 26  | 26  | X   | X   | X   | X   | 4          |

Fig.37

TRUNK GROUP TABLE FOR SW1:

| TGID | TP0 | TP1 | TP2 | TP3 | TP4 | TP5 | TP6 | TP7 | TG<br>SIZE |
|------|-----|-----|-----|-----|-----|-----|-----|-----|------------|
| 1    | 1   | 2   | X   | X   | X   | X   | X   | X   | 2          |
| 2    | 25  | 25  | 25  | 3   | X   | X   | X   | X   | 4          |

TRUNK GROUP TABLE FOR SW2:

| TGID | TP0 | TP1 | TP2 | TP3 | TP4 | TP5 | TP6 | TP7 | TG<br>SIZE |
|------|-----|-----|-----|-----|-----|-----|-----|-----|------------|
| 1    | 26  | 26  | X   | X   | X   | X   | X   | X   | 2          |
| 2    | 25  | 1   | 2   | 26  | X   | X   | X   | X   | 4          |

TRUNK GROUP TABLE FOR SW3:

| TGID | TP0 | TP1 | TP2 | TP3 | TP4 | TP5 | TP6 | TP7 | TG<br>SIZE |
|------|-----|-----|-----|-----|-----|-----|-----|-----|------------|
| 1    | 26  | 26  | X   | X   | X   | X   | X   | X   | 2          |
| 2    | 1   | 26  | 26  | 26  | X   | X   | X   | X   | 4          |

TRUNK GROUP TABLE FOR SW4:

| TGID | TP0 | TP1 | TP2 | TP3 | TP4 | TP5 | TP6 | TP7 | TG<br>SIZE |
|------|-----|-----|-----|-----|-----|-----|-----|-----|------------|
| 1    | 26  | 26  | X   | X   | X   | X   | X   | X   | 2          |
| 2    | 26  | 26  | 26  | 26  | X   | X   | X   | X   | 4          |

FOOTPRINT: 44602660

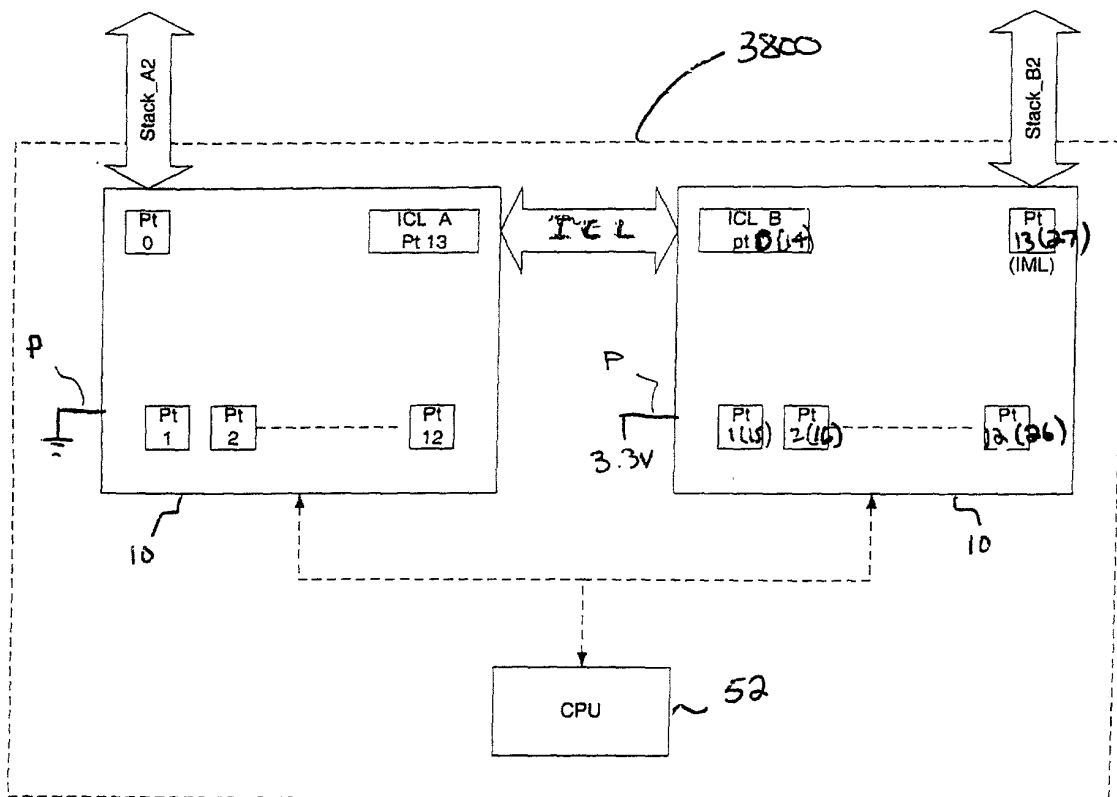


Figure 38

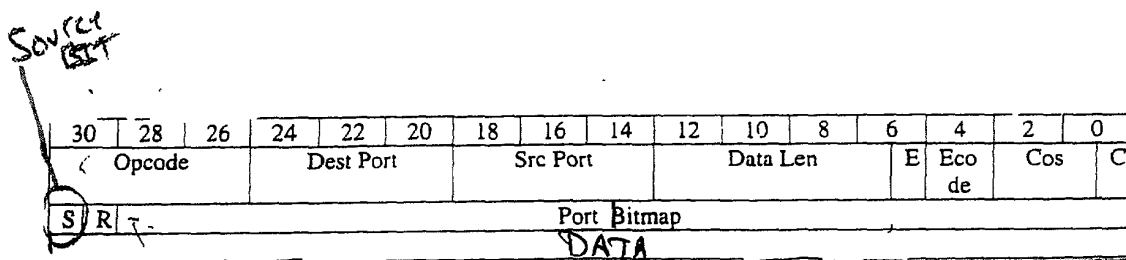
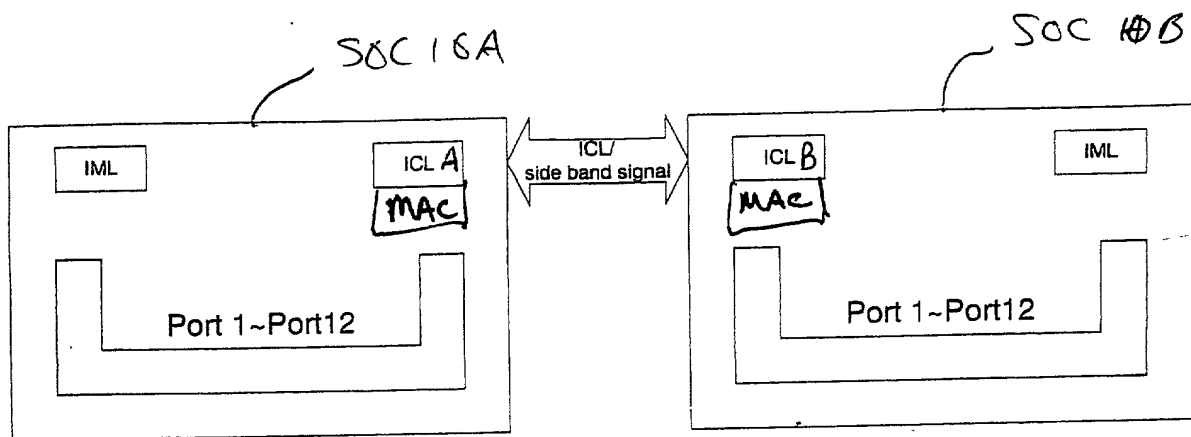
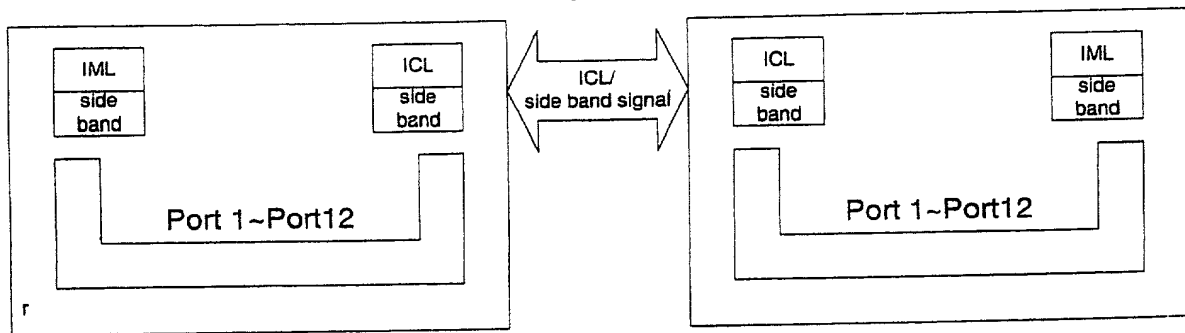


Figure 39



using MAC control frame scheme

figure 40



using side band signal

figure 41

0920944-1080  
"FOOT" 4450260

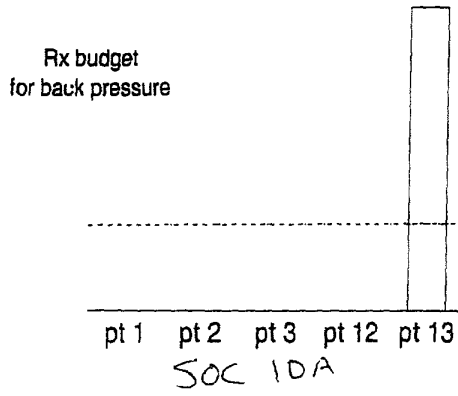


Fig 43A

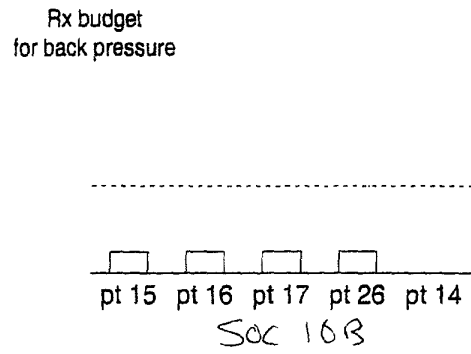


Fig 43B

cell count/pkt count  
for COS/HOL

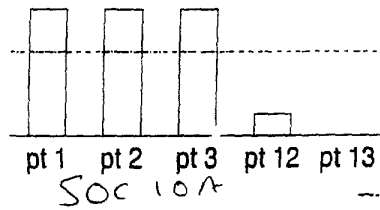


Fig 43C

cell count/pkt count  
for COS/HOL

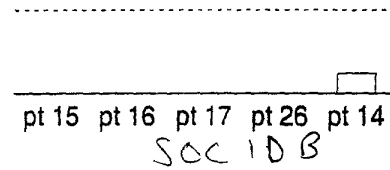


Fig 43D

FIGURE 44602660

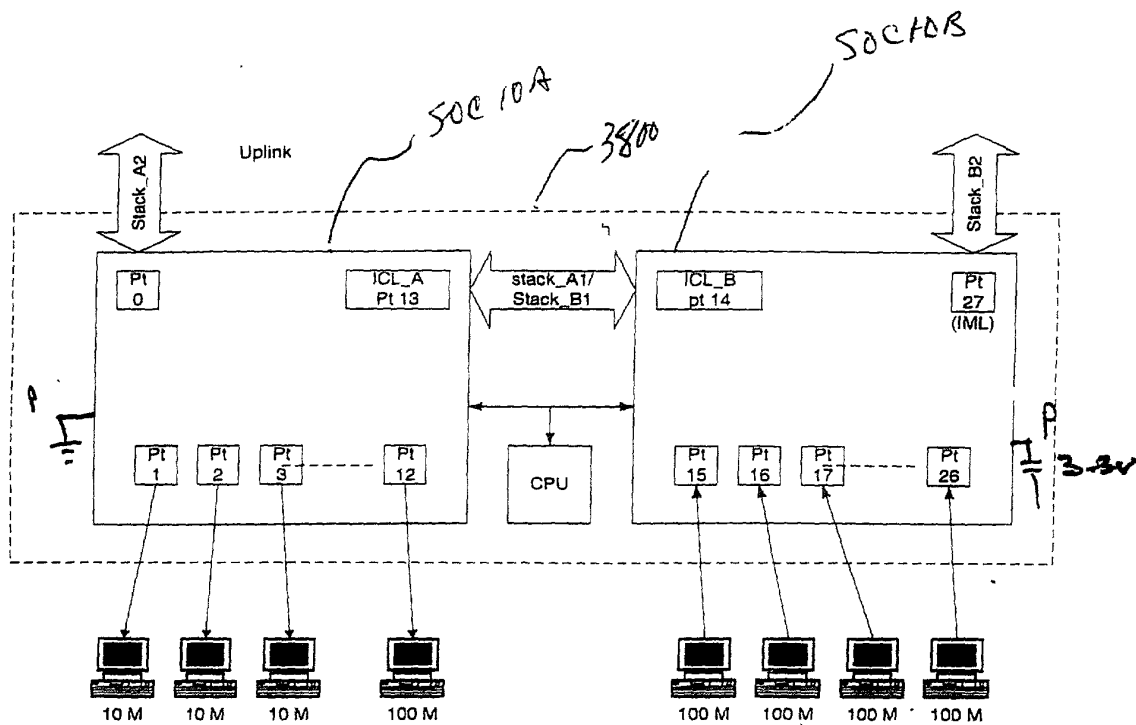
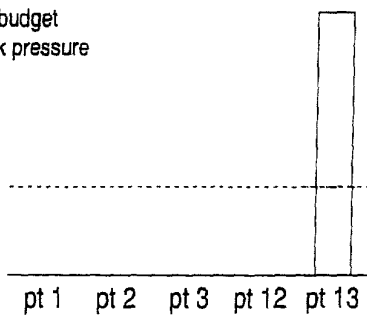


Figure 44



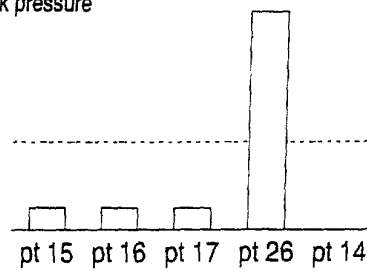
FOUO 4402660

Rx budget  
for back pressure



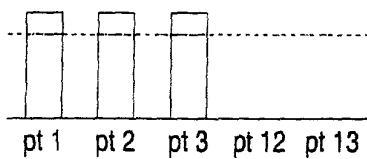
SOC 10A  
Figure 44a

Rx budget  
for back pressure



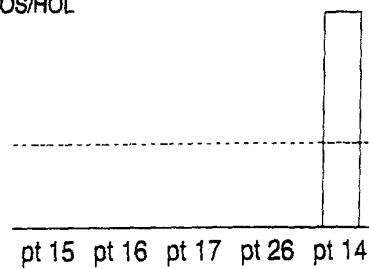
SOC 10B  
Figure 44b

cell count/pkt count  
for COS/HOL



SOC 10A  
Figure 44c

cell count/pkt count  
for COS/HOL



SOC 10B  
Figure 44d

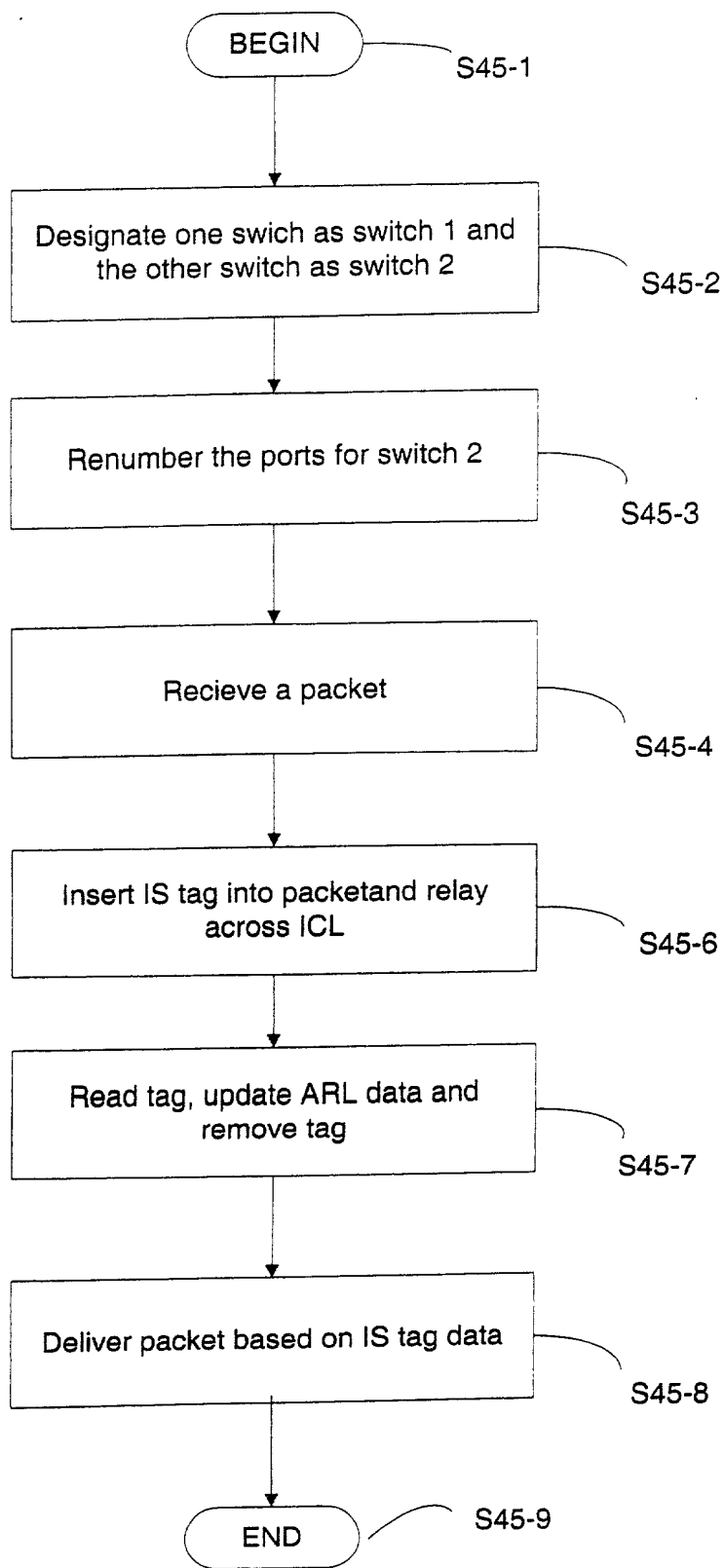


FIG. 45

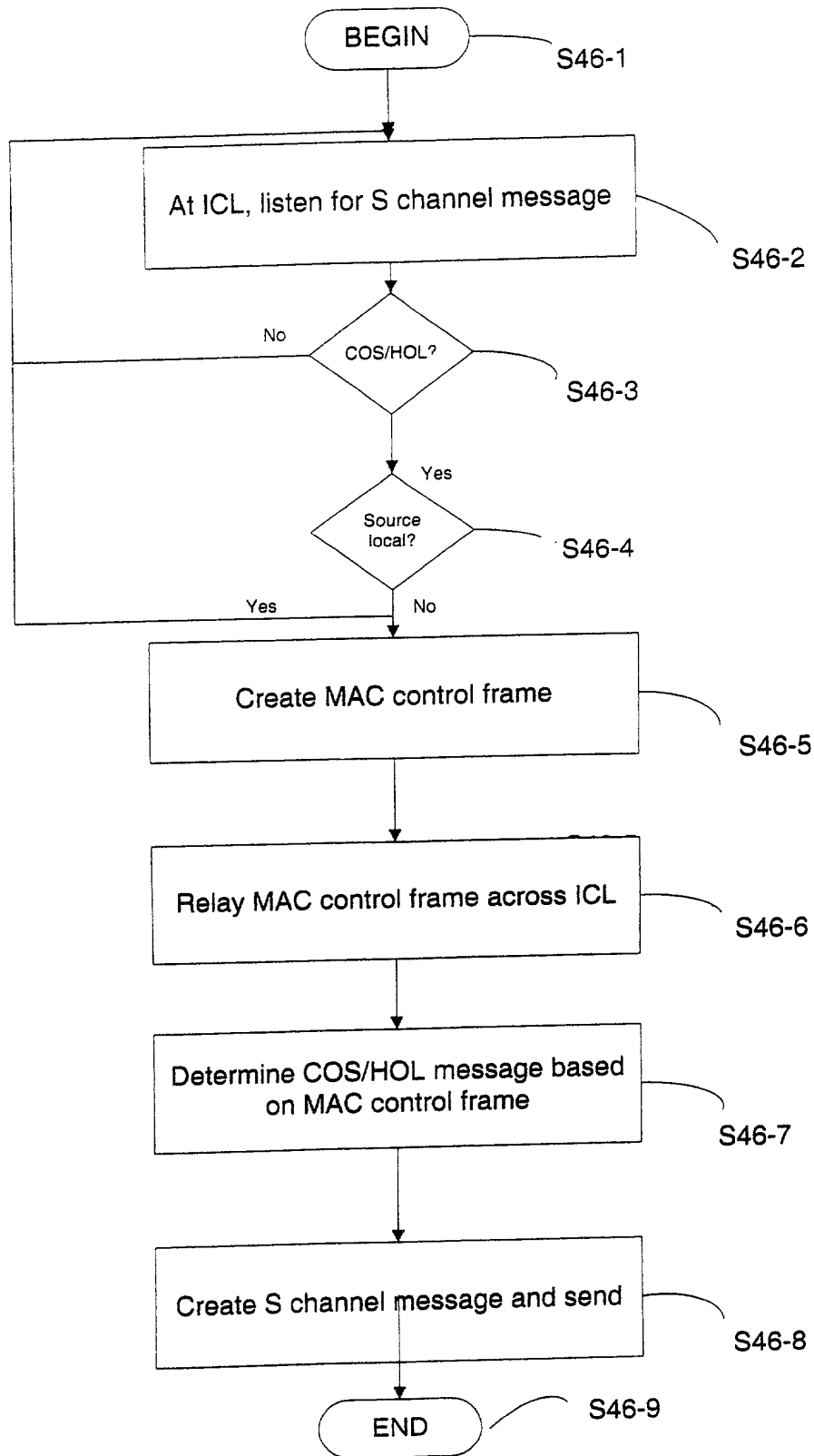


FIG. 46

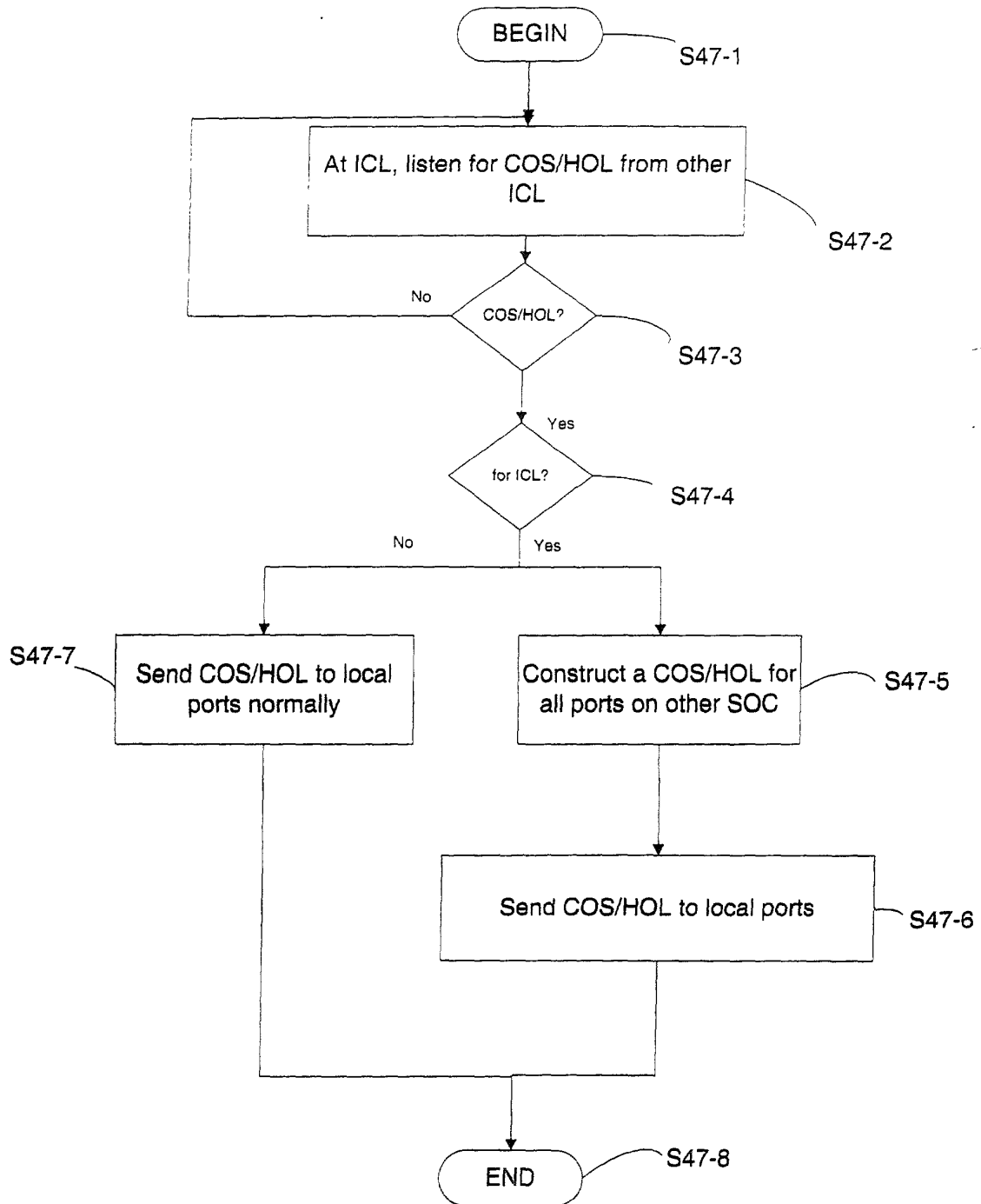


FIG. 47